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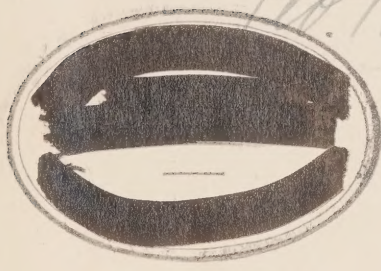
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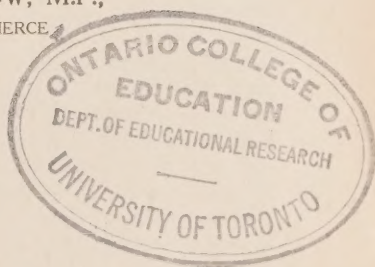
THE CANADA YEAR BOOK 1924

THE OFFICIAL STATISTICAL ANNUAL OF THE
RESOURCES, HISTORY, INSTITUTIONS AND
SOCIAL AND ECONOMIC CONDITIONS
OF THE DOMINION

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LEADING ARTICLES IN CANADA YEAR BOOK 1913-1921.

(Not repeated in this Edition).

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PREFACE.

The Canada Year Book had its origin in the first year of the Dominion. The need of a publication that would assemble in conveniently accessible and summary form the chief comparative statistics of Canada, together with the necessary descriptive matter, was felt immediately after Confederation, when the "Year Book and Almanac of British North America"—being (to quote its sub-title) "an Annual Register of political, vital and trade statistics, customs tariff, excise and stamp duties, and public events of interest in Upper and Lower Canada, New Brunswick, Nova Scotia, Prince Edward Island, Newfoundland and the West Indies"—was founded. Subsequently the title was altered to that of "The Year Book and Almanac of Canada,—an annual statistical abstract of the Dominion and a Register of legislation and of public men in British North America." The work was edited by Mr. Arthur Harvey, F.S.S., of the Department of Finance, but was not a government publication. It was published annually from 1867 to 1879.

In 1886, after the passing of a general Statistics Act, the "Statistical Abstract and Record of Canada" was instituted as an official book of reference respecting the institutions, population, finance, trade and general conditions of the Dominion, "with comparative data for the United Kingdom, British Possessions and foreign countries." The work was prepared in the General Statistical Office of the Department of Agriculture, and was continued annually until 1904, under the direction of Dr. George Johnson, F.S.S. In 1905, the General Statistical Office was amalgamated with the Census Office (which was at the same time made a permanent organization), the Year Book being remodelled by Dr. Archibald Blue, Chief Officer, and continued under the title "The Canada Year Book, Second Series."

In the reorganization and centralization of statistics which followed the Report of the Commission on Statistics of 1912, and the establishment of the Dominion Bureau of Statistics in 1918, the continuous improvement of the Year Book, both in content and method of presentation, was made a primary object. A fundamental purpose of statistical organization is the securing of an *aperçu* or conspectus of the country as an entity, especially as regards its manifold social and economic activities, which are thus viewed both in their totality and in their relations to each other. In addition, therefore, to the branches of the Bureau which deal with specific subjects, such as population, agriculture, mining, trade, education, etc., and which work in collaboration with the various Dominion and Provincial Departments having jurisdiction in corresponding fields, there was created a "General Statistics" branch with the following functions: (a) the carrying on of subsidiary inquiries on a great variety of subjects of less extent and complexity than those assigned to special branches of the Bureau, but essential to a complete and rounded scheme; (b) the synthesizing of general statistics and the interpretation of the general economic trend; (c) the preparation of digests and abstracts of statistics relating to group phenomena; and (d) the bringing of Canadian statistics as a whole into relation with British Empire and world statistics, under the necessary reservations suggested by differing political and economic systems in the different nations. In these multifarious activities, the Branch builds upon the inter-departmental organizations completed by the other branches of the Bureau (which provide for a pooling of data as between the Bureau and the various executive Departments, Dominion and Provincial), but also supplements these materials with other materials drawn from a wide field.

The most important publication of the General Statistics Branch of the Bureau is the Canada Year Book, which is a compendium of official data on the physiography, history, institutions, population, production, industry, trade, transportation, finance, labour, administration, and general social and economic conditions and life of the Dominion—the whole conceived from a wide point of view and presenting the more salient statistics of the country against a background of interpretative matter designed to bring out their significance. It will be appreciated that a work of this character is dependent upon completion of the basic organization of statistics; it has been necessary, therefore, to develop the Year Book gradually, as the improved materials under the Bureau became available.

In the present volume the new features to which special attention may be directed include the following: a summary treatment of natural resources in the physiography section; a discussion of the effect of redistribution in the sub-section on parliamentary representation; a summary of the literacy and school attendance statistics collected at the census of 1921; improvements in the treatment of vital statistics; an expanded article on fruit production and a discussion of the cost of grain production in the sub-section on agriculture; a description of the rise and present position of cotton manufacturing and automobile manufacturing in Canada; an analysis of Canadian external trade at the commencement of the Trade and Commerce section; an analysis of the child labour legislation of the provinces and a detailed description of the methods used in compiling the Bureau's new index number of wholesale prices, in the Labour, Wages and Prices section; a new table showing per capita ordinary receipts and expenditures of provincial governments for various years since 1881; and the first analysis by provinces of the national wealth of Canada. The education section includes accounts of the Royal Society of Canada and the Royal Canadian Institute, while the sub-section on public health and benevolence, commenced in the last edition, has been expanded into a section, filling a long-experienced want for information on Canadian charitable institutions. In the administration section, new statistics are presented, showing the growth of the civil service of Canada since 1912.

Throughout the volume, the latest available information is included in each section, the tables in many cases including figures for the fiscal year 1923-24, and the letter-press supplying supplementary figures extending, in some cases, to the end of the calendar year 1924.

The present edition of the Year Book has been edited by Mr. S. A. Cudmore, B.A. (Tor.), M.A. (Oxon.), F.S.S., F.R. Econ. Soc. Grateful acknowledgments are hereby tendered to the numerous officials of the Dominion and Provincial Governments who have generously assisted in the collection of information. In the compilation, the editor has been assisted by Messrs. Jos. Wilkins and Paul Sykes, while Mr. S. B. Smith has helped in the preparation of the mining and manufactures sub-sections, as well as with the index; Mr. Jas. Skead, who for some forty years had rendered valuable service in the compilation of the Year Book tables, was superannuated in 1924. Most of the diagrams in the volume were drawn by Mr. R. E. Watts.

R. H. COATS,

Dominion Statistician.

Dominion Bureau of Statistics,
Ottawa, Dec. 31, 1924.

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STATISTICAL SUMMARY OF THE PROGRESS OF CANADA.

Area of the Dominion of Canada in square miles: Land, 3,603,909; Water, 125,756; Total, 3,729,665.

	Items.	1871.	1881.	1891.	1896.	1901.
Population¹—						
1	Prince Edward Island..... No.	94,021	108,891	109,678	106,000	103,259
2	Nova Scotia.....	387,800	440,572	450,396	455,000	459,574
3	New Brunswick.....	285,594	321,233	321,263	326,000	331,120
4	Quebec.....	1,191,516	1,359,027	1,488,535	1,571,000	1,648,898
5	Ontario.....	1,620,851	1,926,922	2,114,321	2,150,000	2,182,947
6	Manitoba.....	25,228	62,260	152,506	196,000	255,211
7	Saskatchewan.....	—	—	—	—	91,279
8	Alberta.....	—	—	—	—	73,022
9	British Columbia.....	36,247	49,459	98,173	135,000	178,657
10	Yukon Territory.....	—	—	—	—	27,219
11	Northwest Territories.....	48,000	56,446	98,957	147,000	20,129
	Canada.....	3,689,257	4,324,810	4,833,239	5,086,000	5,371,315
Immigration—						
12	From United Kingdom..... No.	—	—	—	11,383 ²	11,810
13	“ United States.....	—	—	—	2,412 ²	17,987
14	“ Other Countries.....	—	—	—	7,921 ²	19,352
	Total.....	27,773	47,991	82,165	21,716 ²	49,149
Agriculture—						
15	Area of occupied farms..... acre	36,046,401	45,538,141	58,997,995	—	63,422,338
16	Improved lands.....	17,335,818	21,899,181	27,729,852	—	30,166,033
Field Crops³—						
17	Wheat..... acre	1,646,781	2,366,554	2,701,213	—	4,224,542
	“ bush.....	16,723,873	32,350,269	42,223,372	—	55,572,368
	“ \$.....	16,993,265	38,820,323	31,667,529	—	36,122,039
18	Oats..... acre	—	—	3,961,356	—	5,367,655
	“ bush.....	42,489,453	70,493,131	83,428,202	—	151,497,407
	“ \$.....	15,966,310	23,967,655	31,702,717	—	51,509,118
19	Barley..... acre	—	—	868,464	—	871,800
	“ oush.....	11,496,038	16,844,868	17,222,705	—	22,224,366
	“ \$.....	8,170,735	11,791,408	8,611,397	—	8,889,746
20	Corn..... acre	—	—	195,101	—	360,758
	“ oush.....	3,803,830	9,025,142	10,711,380	—	25,875,919
	“ \$.....	2,883,145	5,415,085	5,034,348	—	11,902,923
21	Potatoes..... acre	403,102	464,289	450,190	—	448,743
	“ bush.....	47,330,187	55,268,227	53,490,857	—	55,362,635
	“ \$.....	15,211,774	13,288,510	21,396,342	—	13,842,658
22	Hay and Clover..... acre	3,650,419	4,458,349	5,931,548	—	6,543,423
	“ ton.....	3,818,641	5,055,810	7,693,733	—	7,852,731
	“ \$.....	38,869,900	40,446,480	69,243,597	—	85,625,315
	Total Area Field Crops..... acre	—	—	—	—	—
	Total Value Field Crops..... \$	—	—	—	—	194,953,420
Live Stock—						
23	Horses..... No.	836,743	1,059,358	1,470,572	—	1,577,493
	“ \$.....	—	—	—	—	118,279,419
24	Milch Cows..... No.	1,251,209	1,595,800	1,857,112	—	2,408,677
	“ \$.....	—	—	—	—	69,237,970
25	Other Cattle..... No.	1,373,081	1,919,189	2,263,474	—	3,167,174
	“ \$.....	—	—	—	—	54,197,341
26	Sheep..... No.	3,155,509	3,048,678	2,562,781	—	2,510,239
	“ \$.....	—	—	—	—	10,490,594
27	Swine..... No.	1,366,083	1,207,619	1,733,850	—	2,353,828
	“ \$.....	—	—	—	—	16,445,702
	Total value..... \$	—	—	—	—	268,651,026
Dairying—						
28	Cheese, factory..... lb.	—	—	—	—	220,833,469
	“ \$.....	1,601,738	5,464,454	9,784,288	—	22,221,430
29	Butter, creamery..... lb.	—	341,478	913,591	—	36,066,739
	“ \$.....	—	—	—	—	7,240,972
30	Miscellaneous dairy products.. \$	—	—	—	—	269,520
	Total value of dairy products \$	—	—	—	—	29,731,922
Fisheries—						
	Total value..... \$	7,573,199	15,817,162	18,977,874	20,407,424	25,737,153

¹ Estimated populations are given for inter-censal and post-censal years. ² 1897. ³ The figures of field crops (1871-1911) are for the preceding years.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA.

Area of the Dominion of Canada in square miles: Land, 3,603,909; Water, 125,756; Total, 3,729,665.

1906.	1911.	1916.	1920.	1921.	1922.	1923.	1924.	
98,222	93,728	90,916	89,014	88,615	88,400	88,020	87,700	1
476,119	492,338	506,660	520,040	523,837	527,100	530,000	533,600	2
341,682	351,889	368,844	383,799	387,876	391,700	395,500	399,400	3
1,822,992	2,005,776	2,177,352	2,322,801	2,361,199	2,400,000	2,439,300	2,480,000	4
2,352,470	2,527,202	2,722,804	2,889,468	2,933,662	2,976,000	3,019,900	3,062,000	5
343,082	461,394	553,860	598,449	610,118	627,000	637,400	647,000	6
251,730	492,432	647,835	735,080	757,510	778,000	797,000	815,000	7
182,813	374,295	496,525	569,670	588,454	605,000	621,000	637,000	8
268,276	392,480	457,243	510,757	524,582	535,000	544,000	553,000	9
14,899	8,512	6,317	4,586	4,157	3,800	3,600	3,550	10
18,364	6,507	7,228	7,831	7,988	8,150	8,320	8,490	11
6,170,649	7,206,643	8,035,584	8,631,475	8,788,483 ^a	8,940,150	9,082,840	9,226,740	
86,796	123,013	8,664	59,603	74,262	39,020	34,508	72,919	12
57,796	121,451	36,937	49,656	48,059	29,345	22,007	20,521	13
44,472	66,620	2,936	8,077	26,156	21,634	16,372	55,120	14
189,064	311,084	48,537	117,336	148,477	89,999	72,887	148,560	
-	108,968,715	-	-	140,887,903	-	-	-	15
-	48,733,823	-	-	70,769,548	-	-	-	16
-	8,864,154	15,369,709	18,232,374	23,261,224	22,422,693	22,671,864	22,055,710	17
-	132,077,547	262,781,000	263,189,300	300,858,100	399,786,400	474,199,000	262,097,000	
-	104,816,825	344,096,400	427,357,300	242,936,000	339,419,000	316,934,700	320,362,000	
-	8,656,179	10,996,487	15,849,928	16,949,029	14,541,229	14,387,807	14,491,289	18
-	245,393,425	410,211,000	530,709,700	426,232,900	491,239,000	563,997,560	411,697,000	
-	86,796,130	210,957,500	280,115,400	146,395,300	185,455,000	184,857,400	203,034,000	
-	1,283,994	1,802,996	2,551,919	2,795,665	2,599,520	2,784,571	3,407,441	19
-	28,848,010	42,770,000	63,310,550	59,709,100	71,865,300	76,997,800	86,753,000	
-	14,653,697	35,024,000	52,821,400	28,254,150	33,335,300	32,570,700	60,509,000	
-	293,951	173,000	291,650	296,866	318,397	317,729	295,015	20
-	14,417,599	6,282,000	14,334,800	14,904,000	13,798,000	13,608,000	11,998,000	
-	5,774,039	6,747,000	16,593,400	12,317,000	11,509,700	12,466,000	14,227,000	
-	464,504	472,992	784,514	701,912	683,594	560,942	561,628	21
-	55,461,478	63,297,000	80,298,840 ^a	64,407,600 ^a	55,745,300 ^a	55,497,000 ^a	56,648,000 ^a	
-	27,426,765	50,982,300	129,803,300	82,147,600	50,320,000	56,397,800	47,956,000	
-	8,289,407	7,821,257	10,379,292	10,614,951	10,001,667	9,725,602	9,874,907	22
-	10,406,367	14,527,000	13,338,700	11,366,100	14,488,200	14,844,900	14,960,300	
-	90,115,531	168,547,900	348,166,200	267,764,200	194,950,000	162,882,000	165,587,000	
-	-	38,930,333	52,830,865	50,635,346	57,189,681	57,230,534	58,308,542	
-	384,513,795	886,494,900	1,455,244,050	931,863,670	962,293,200	899,166,200	996,257,900	
-	2,598,958	3,246,430	3,400,352	3,813,921	3,648,871	3,530,641	3,588,788	23
-	381,915,505	418,686,000	361,328,000	314,764,000	264,043,000	223,154,000	229,421,000	
-	2,595,255	2,835,532	3,530,238	3,736,832	3,745,804	3,659,365	3,726,985	24
-	109,575,526	198,896,000	281,675,000	190,157,000	179,141,000	173,015,000	170,567,000	
-	3,930,828	6,373,155	5,947,142	6,469,373	5,974,065	5,886,866	5,733,851	25
-	86,278,490	204,477,000	279,825,100	183,649,000	156,441,000	143,458,000	154,524,000	
-	2,174,300	2,025,030	3,720,783	3,675,860	3,263,525	2,753,860	2,684,743	26
-	10,701,691	20,927,000	37,263,000	23,308,000	24,962,000	21,321,000	24,036,000	
-	3,634,778	3,484,982	3,516,678	3,904,895	3,915,684	4,405,316	5,069,181	27
-	26,986,621	60,700,000	81,155,000	54,842,000	57,300,000	52,312,000	62,596,000	
-	615,457,833	903,686,000	1,041,246,100	766,720,000	681,887,000	613,260,000	641,144,000	
204,788,583	190,904,205	192,968,597	149,201,856	162,117,494	135,821,116	151,483,353	-	28
23,597,639	21,587,124	35,512,622	39,100,872	28,710,030	21,824,760	28,629,366	-	
45,930,294	64,698,165	82,564,130	111,691,718	128,744,610	152,501,900	163,456,759	-	29
10,949,062	15,645,845	20,966,355	63,625,203	48,135,439	53,453,282	56,894,008	-	
910,842	1,814,871	-	43,610,416	35,078,548	29,694,001	34,587,188	-	30
35,457,543	39,047,840	-	146,336,491	111,924,017	104,972,046	120,110,592	-	
26,279,485	34,667,872	35,800,708	49,241,339 ⁷	34,931,935 ⁷	41,800,210 ⁷	42,565,545 ⁷	-	

^a The figures for 1924 are subject to revision. ^b Includes Canadian Navy. ^c Cwt. ^d Calendar years.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—con.

	Items.	1871.	1881.	1891.	1896.	1901.
Minerals—						
1	Gold..... oz.	105,187	63,524	45,018	133,262	1,167,216
	\$	2,174,412	1,313,153	930,614	2,751,774	24,128,503
2	Silver..... oz.	—	355,083 ¹	414,523	3,205,343	5,539,192
	\$	—	347,271 ¹	409,519	2,149,505	3,265,354
3	Copper..... lb.	—	3,260,424 ¹	9,529,401	9,393,012	37,827,019
	\$	—	366,798 ¹	1,226,703	1,021,960	6,096,581
4	Lead..... lb.	—	204,800 ¹	88,665	24,199,977	51,990,958
	\$	—	9,216 ¹	3,857	71,159	2,249,387
5	Nickel..... lb.	—	839,477	4,035,347	3,397,113	9,189,047
	\$	—	498,286	2,421,208	1,188,990	4,594,523
6	Pig iron..... ton	—	24,827 ¹	23,891	67,268	274,376
	\$	—	366,192 ¹	368,901	924,129	3,512,923
7	Coal..... ton	1,063,742 ²	1,537,106	3,577,749	3,745,716	6,486,325
	\$	1,763,423 ²	2,688,621	7,019,425	7,226,462	12,699,243
8	Cement..... brl.	—	69,843 ¹	93,479	149,090	450,394
	\$	—	81,909 ¹	108,561	201,651	660,030
	Total value..... \$	—	10,221,255 ³	18,976,616	22,474,256	65,797,911
Manufactures⁴—						
9	Employees..... No.	187,942	254,894	272,033	—	339,173
10	Capital..... \$	77,964,020	164,957,423	353,213,000	—	446,916,487
11	Salaries and wages..... \$	40,851,009	59,401,702	79,234,311	—	113,249,350
12	Products..... \$	221,617,773	309,731,867	368,696,723	—	481,053,375
External Trade—						
13	Exports ⁵ \$	57,630,024	83,944,701	88,671,738	109,707,805	177,431,386
14	Imports ⁶ \$	84,214,388	90,488,329	111,533,954	105,361,161	177,930,919
	Total..... \$	141,844,412	174,433,030	200,205,692	215,068,966	355,362,305
Exports, domestic, by chief items—						
15	Wheat..... bush.	1,748,977	2,523,673	2,108,216	9,919,542	9,739,758
	\$	1,981,917	2,593,820	1,583,084	5,771,521	6,871,939
16	Wheat flour..... brl.	306,339	439,728	296,784	186,716	1,118,700
	\$	1,609,849	2,173,108	1,388,578	718,433	4,015,226
17	Oats..... bush.	542,386	2,926,532	260,560	968,137	8,155,063
	\$	231,227	1,791,873	129,917	273,861	2,490,521
18	Hay..... ton	23,487	168,381	65,083	214,640	252,977
	\$	290,217	1,813,208	559,489	1,976,431	2,097,882
19	Bacon and hams, shoulders and sides..... cwt.	103,444	103,547	75,541	537,361	1,055,495
	\$	1,018,918	758,334	628,469	4,381,968	11,778,446
20	Butter..... lb.	15,439,266	17,649,491	3,768,101	5,889,241	16,335,528
	\$	3,065,234	3,573,034	602,175	1,052,089	3,295,663
21	Cheese..... lb.	8,271,439	49,255,523	106,202,140	164,689,123	195,926,697
	\$	1,109,906	5,510,443	9,508,800	13,956,571	20,696,951
22	Gold..... \$	163,037	767,318	554,126	1,099,053	24,445,156
23	Silver..... oz.	—	—	—	2,508,233	4,022,019
	\$	595,261	34,494	238,367	1,595,548	2,420,750
24	Copper ⁷ lb.	6,246,000	39,604,000	10,994,498	3,575,482	26,345,776
	\$	120,121	150,412	505,196	194,771	2,659,261
25	Nickel..... lb.	—	—	5,352,043	6,996,540	9,537,558
	\$	—	—	240,499	486,651	958,365
26	Coal..... ton	318,287	420,055	833,684	1,025,060	1,888,538
	\$	662,451	1,123,091	2,916,465	3,249,069	5,307,060
Exports, domestic, by classes—						
27	Vegetable products (except chemicals, fibres and wood)..... \$	—	—	13,742,557	14,606,735	25,541,567
28	Animals and their products (except chemicals and fibres)..... \$	—	—	36,399,140	48,763,906	68,465,332
29	Fibres, textiles and textile products..... \$	—	—	872,628	2,104,013	1,880,539
30	Wood, wood products and paper..... \$	—	—	25,351,085	28,772,187	33,099,915
31	Iron and its products..... \$	—	—	556,527	1,188,254	3,778,897
32	Non-ferrous metals and their products..... \$	—	—	1,618,955	3,843,475	33,395,096
33	Non-metallic minerals and their products..... \$	—	—	3,988,584	4,368,013	7,356,324
34	Chemicals and allied products..... \$	—	—	851,211	481,661	791,975
35	All other commodities..... \$	—	—	5,291,051	5,579,561	3,121,741
	Total exports, domestic..... \$	57,630,024	83,944,701	88,671,738	109,707,805	177,431,386

¹ 1887. ² 1874. ³ 1886. ⁴ The statistics of manufactures in 1871, 1881, 1919, 1920 and 1921, include works employing fewer than five hands, while those of 1891, 1901 and 1911 are for works employing five hands and over, except in the case of butter and cheese factories, flour and grist mills, electric light plants, lumber, lath and shingle mills, lime kilns, brick and tile works and fish canneries. For 1920, 1921 and 1922

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—con.

1906.	1911.	1916.	1920.	1921.	1922.	1923.	1924.*	
556,415	473,159	930,492	765,007	926,329	1,263,364	1,233,341	1,516,360	1
11,502,120	9,781,077	19,234,976	15,814,098	19,148,920	26,116,050	25,495,421	31,345,941	
8,473,379	32,559,044	25,459,741	13,330,357	13,543,198	18,581,439	18,601,744	20,743,846	2
5,659,455	17,355,272	16,717,121	13,450,330	8,485,355	12,576,758	12,067,509	13,519,043	
55,609,888	55,648,011	117,150,028	81,600,691	47,620,820	42,879,818	86,881,537	106,350,730	3
10,720,474	6,886,998	31,867,150	14,244,217	5,953,555	5,738,177	12,529,186	13,851,118	
54,608,217	23,784,969	41,497,615	35,953,717	66,679,592	93,307,171	111,234,466	177,756,076	4
3,089,187	827,717	3,532,692	3,214,262	3,828,742	5,817,702	7,985,522	14,405,353	
21,490,955	34,098,744	82,958,564	61,335,706	19,293,060	17,597,123	62,453,843	69,586,759	5
8,948,834	10,229,623	29,035,498	24,534,282	6,752,571	6,158,993	18,332,077	19,484,299	
598,411	917,535	1,169,257	1,090,396	665,676	428,923	985,401	664,187	6
7,955,136	12,307,125	16,750,898	30,319,024	15,511,828	8,819,242	21,355,595	14,825,600	
9,762,601	11,323,388	14,483,395	16,631,954	15,057,495	15,157,431	16,990,571	13,617,313	7
19,732,019	26,467,646	38,817,481	80,693,723	72,451,656	65,518,497	72,058,985	54,885,239	
2,128,374	5,692,915	5,369,560	6,651,980	5,752,885	6,943,372	7,543,598	7,499,372	8
3,170,859	7,644,537	6,547,728	14,798,070	14,195,143	15,438,481	15,064,661	13,445,156	
79,286,697	103,220,994	177,201,534	227,859,665	171,923,342	184,297,242	214,079,331	209,516,465	
383,920	515,203	—	583,112	439,889	462,573	—	—	9
833,916,155	1,247,583,609	—	3,208,613,715	3,052,818,103	3,125,772,761	—	—	10
162,155,578	241,008,416	—	695,216,542	498,430,750	497,113,554	—	—	11
706,446,578	1,165,975,639	—	3,667,180,375	2,516,977,811	2,439,843,766	—	—	12
235,483,956	274,316,553	741,610,638	1,239,492,098	1,189,163,701	740,240,680	931,451,443	1,045,141,056	13
283,740,280	452,724,603	508,201,134	1,064,528,123	1,240,158,882	747,804,332	802,579,244	893,366,867	14
519,224,236	727,041,156	1,249,811,772	2,304,020,221	2,429,322,583	1,488,045,012	1,734,030,687	1,938,507,923	
40,399,402	45,802,115	157,745,469	77,978,037	129,215,157	136,489,238	215,074,566	256,870,237	15
33,658,391	45,521,134	172,896,445	185,044,806	310,952,138	179,990,730	252,145,805	267,758,559	
1,532,014	3,049,046	6,400,214	8,863,068	6,017,032	7,414,282	10,227,060	11,714,929	16
6,179,825	13,854,790	35,767,044	94,262,928	66,500,490	53,478,150	60,075,426	62,783,118	
2,700,303	5,451,662	26,816,322	10,768,872	14,321,048	36,195,127	29,022,347	23,348,698	17
1,083,547	2,144,846	14,637,849	9,349,455	14,152,033	18,717,105	14,533,015	11,146,408	
206,714	326,132	255,407	218,561	179,398	31,287	58,300	332,293	18
1,529,941	2,723,291	5,849,426	4,087,670	4,210,594	650,379	927,143	3,725,282	
1,029,079	598,745	1,536,517	2,235,426	982,338	992,080	1,015,901	998,245	19
12,086,868	8,526,332	27,090,113	70,123,530	31,492,407	23,012,480	22,536,397	18,113,755	
34,031,525	3,142,682	3,441,183	17,612,605	9,739,414	8,430,591	21,994,578	13,648,968	20
7,075,339	744,288	1,018,769	9,844,359	5,128,831	3,224,390	8,243,138	5,070,691	
215,834,543	181,899,524	168,961,583	126,395,777	133,620,340	133,849,800	114,549,900	116,777,000	21
24,433,169	20,739,507	26,690,500	36,336,863	37,146,722	25,440,322	20,828,234	23,426,282	
12,991,916	5,344,465	16,870,394	5,974,334	3,038,779	2,532,050	5,449,469	17,384,090	22
21,611,527	33,731,010	27,794,566	12,379,642	13,331,050	13,601,420	17,111,416	17,948,266	23
4,310,528	17,269,168	14,298,351	14,255,601	11,127,432	8,711,304	11,458,992	11,539,783	
44,282,348	55,005,342	111,046,300	42,003,300	36,167,900	10,333,900	21,451,300	44,965,200	24
7,148,633	5,575,033	14,670,073	5,253,218	4,336,972	1,029,417	2,035,511	4,754,413	
23,959,841	34,767,523	70,443,000	44,140,700	47,018,300	10,904,700	42,628,500	56,399,200	25
2,166,936	3,842,332	7,714,769	9,039,221	9,405,291	2,689,702	8,880,641	9,388,511	
1,820,511	2,315,171	1,971,124	2,120,138	2,277,202	1,953,053	2,089,438	1,217,835	26
4,643,198	6,014,095	6,032,765	13,183,666	16,501,478	13,182,440	12,956,615	7,842,259	
55,828,252	84,556,886	257,249,193	416,122,771	482,924,672	317,578,963	407,760,092	430,932,150	27
84,570,644	69,693,263	138,375,083	314,017,944	188,359,937	135,798,720	135,841,642	140,423,284	28
2,602,903	1,818,931	15,097,691	34,028,314	18,783,884	4,585,987	7,850,843	8,055,083	29
45,716,762	56,334,695	83,116,282	213,913,944	284,561,478	179,925,887	228,756,205	273,354,778	30
4,705,296	9,884,346	66,127,099	81,785,829	76,500,741	28,312,272	51,137,912	66,975,571	31
28,455,786	34,000,996	66,036,542	54,976,413	45,939,377	27,885,996	44,358,037	65,911,171	32
7,817,475	10,038,493	11,879,741	30,342,926	40,121,892	22,616,684	27,646,704	26,776,330	33
1,784,800	2,900,379	15,948,480	22,581,049	19,582,051	9,506,170	14,046,940	15,349,956	34
4,022,038	5,088,564	87,780,527	71,722,908	32,839,669	14,030,001	14,053,068	17,362,733	35
235,483,956	274,316,553	741,610,638	1,239,492,098	1,189,163,701	740,240,680	931,451,443	1,045,141,056	

statistics are exclusive of construction, hand trades, repair and custom work. *Exports of domestic merchandise only. †Imports of merchandise for home consumption. ‡Copper, fine, contained in ore. matre, regulus, etc. §The figures for 1924 are subject to revision. ¶Estimated at \$25 per long ton.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—con.

	Items.	1871.	1881.	1891.	1896.	1901.
Imports for consumption—						
1	Vegetable products (except chemicals, fibres and wood). \$	—	—	24,212,140	22,742,835	38,036,757
2	Animals and their products (except chemicals and fibres) \$	—	—	8,080,862	7,599,802	14,022,896
3	Fibres, textiles and textile products. \$	—	—	28,670,141	27,421,519	37,284,752
4	Wood, wood products and paper \$	—	—	5,203,490	4,787,288	8,196,901
5	Iron and its products. \$	—	—	15,142,615	13,393,762	29,955,936
6	Non-ferrous metals and their products. \$	—	—	3,810,626	2,967,439	7,159,142
7	Non-metallic minerals and their products (except chemicals). \$	—	—	14,139,024	13,736,879	21,255,403
8	Chemicals and allied products. \$	—	—	3,697,810	3,840,806	5,692,564
9	All other commodities. \$	—	—	8,577,246	8,870,831	16,326,568
	Total imports. \$	84,214,388	90,488,329	111,533,954	105,361,161	177,930,919
Steam Railways—						
10	Miles in operation. No.	2,695	7,331	13,838	16,270	18,140
11	Capital. \$	257,035,188 ¹	284,419,293	632,061,440	697,212,941	816,110,837
12	Passengers. No.	5,190,416 ²	6,943,671	13,222,568	13,059,023	18,385,722
13	Freight. ton	5,670,836 ²	12,065,323	21,753,021	24,248,294	36,999,371
14	Earnings. \$	19,470,539 ²	27,987,509	48,192,099	50,374,295	72,898,749
15	Expenses. \$	15,775,532 ²	20,121,418	34,960,449	34,893,337	50,368,726
Electric Railways—						
16	Miles in operation. No.	—	—	—	—	675
17	Capital. \$	—	—	—	—	—
18	Passengers. No.	—	—	—	—	120,934,656
19	Freight. ton	—	—	—	—	287,926
20	Earnings. \$	—	—	—	—	5,768,283
21	Expenses. \$	—	—	—	—	3,435,162
Canals—						
22	Passengers carried. No.	100,377	118,136	146,336	151,342	190,428
23	Freight. ton	3,955,621	2,853,230	2,902,526	7,991,073	5,665,259
Shipping (Sea-going)						
24	Entered. ton	2,521,573	4,032,946	5,273,935	5,895,360	7,514,732
25	Cleared. “	2,594,460	4,071,391	5,421,261	5,563,464	7,028,330
	Total. “	5,116,033	8,104,337	10,695,196	11,458,824	14,543,062
Shipping (Inland International)—						
26	Entered. ton	4,055,198	2,934,503	4,098,434	5,323,260	5,720,575
27	Cleared. “	3,954,797	2,763,597	4,009,018	5,088,389	5,766,171
	Total. “	8,009,995	5,698,095	8,107,452	10,411,649	11,486,746
Shipping (Coastwise)—						
28	Entered. ton	—	7,664,863	12,835,774	14,049,916	17,927,959
29	Cleared. “	—	7,451,903	12,150,356	13,381,837	16,516,832
	Total. “	—	15,116,766	24,986,130	27,431,753	34,444,796
30	Telegraphs, Government, miles of line.	—	1,947	2,699	2,786	5,744
31	Telegraphs, other, miles of line.	—	—	27,866	28,949	30,194
32	Telephones. No.	—	—	—	—	63,192
33	Motor vehicles. “	—	—	—	—	—
Post Office—						
34	Revenue. \$	803,637	1,344,970	2,515,823	2,971,653	3,421,192
35	Expenditure. \$	994,876	1,876,658	3,161,676	3,752,805	3,837,376
36	Money orders issued. \$	4,546,434	7,725,212	12,478,178	13,081,861	17,956,258
Dominion Finance—						
37	Customs Revenue. \$	11,841,105	18,406,092	23,305,218	19,766,741	28,293,930
38	Excise Revenue. \$	4,295,945	5,343,022	6,914,850	7,926,006	10,318,266
39	Total Ordinary Revenue. \$	19,335,561	29,635,298	38,579,311	36,618,591	52,514,701
40	Revenue per head. \$	5-50	6-83	7-96	7-20	9-72
41	Total Ordinary Expenditure. \$	15,623,082	25,502,554	36,343,568	36,949,142	46,866,368
42	Expenditure per head. \$	4-44	5-88	7-50	7-26	8-67
43	Total Disbursements. \$	19,293,478	33,796,643	40,793,203	44,096,384	57,982,866
44	Disbursements per head. \$	5-48	7-79	8-42	8-64	10-73
45	Gross debt. \$	115,492,683	199,861,537	289,899,230	325,717,537	354,732,433
46	Assets. \$	37,786,165	44,465,577	52,090,199	67,220,104	86,252,429
	Net debt. \$	77,706,518	155,395,780	237,809,031	258,497,433	268,480,004

¹Year 1876. ²Year 1875.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—con.

1906.	1911.	1916.	1920.	1921.	1922.	1923.	1924. ³	
50,330,667	79,214,342	95,426,024	242,075,389	261,081,364	172,665,523	161,669,784	186,468,685	1
23,616,835	30,671,908	38,657,514	95,098,743	61,722,390	46,645,789	46,736,774	45,026,734	2
59,292,868	87,916,282	96,191,485	231,559,877	243,608,342	139,997,137	170,146,958	173,795,660	3
14,341,947	26,851,936	18,277,420	43,183,267	57,449,384	35,791,487	35,845,544	40,976,833	4
49,436,840	91,968,180	92,065,895	186,319,876	245,625,703	110,210,539	138,724,455	173,473,503	5
17,527,922	27,655,874	29,448,661	52,103,913	55,553,902	29,773,413	37,492,604	43,432,617	6
33,757,284	53,335,826	53,427,531	121,956,176	206,095,113	137,604,140	139,989,012	155,899,393	7
8,251,378	12,489,776	19,258,326	29,886,102	36,334,612	24,630,333	25,793,101	26,088,041	8
27,184,539	42,620,479	65,448,278	62,344,780	72,688,072	50,485,971	46,181,012	48,205,041	9
283,740,280	452,724,603	508,201,134	1,064,528,123	1,240,158,882	747,804,332	802,579,244	893,366,867	
21,353	25,400	37,434	39,384	39,771	39,773	40,094		10
1,065,881,629	1,528,689,201	1,893,125,774	2,170,030,128	2,164,687,636	2,159,277,131	3,264,674,038		11
27,989,782	37,097,718	43,503,459	51,318,422	46,793,251	44,383,620	44,834,337		12
57,966,713	79,884,282	109,659,088	127,429,154	103,131,132	108,530,518	118,289,604		13
125,322,865	188,733,494	261,888,654	492,101,104	458,008,891	440,687,128	478,338,046		14
87,129,434	131,034,785	180,542,259	478,248,154	422,581,205	393,927,406	413,862,818		15
814	1,224	1,674	1,699	1,687	1,724	1,736		16
237,655,074	426,296,792	580,094,167	804,711,333	719,305,441	738,908,949	737,282,038		17
506,024	1,228,362	1,936,674	2,691,150	2,285,886	2,445,425	3,145,863		18
10,966,871	20,356,952	27,416,285	47,047,246	44,536,833	49,660,485	50,191,387		19
6,675,037	12,096,134	18,099,906	37,242,483	35,945,316	35,986,872	36,171,923		21
256,500	304,904	263,648	230,468	230,129	219,519	220,592	208,587	22
10,523,185	38,030,353	23,583,491	8,735,383	9,407,021	10,026,055	11,199,434	12,868,551	23
8,895,353	11,919,339	12,616,927	12,010,374	12,516,506	13,620,183	17,095,883	18,497,025	24
7,948,076	12,377,847	12,210,723	13,234,380	12,400,226	13,974,287	17,182,454	18,521,377	25
16,843,429	22,297,186	24,827,656	25,244,754	24,916,729	27,594,470	34,278,337	37,018,402	
9,352,653	13,286,102	16,486,778	12,084,264	14,828,454	14,359,222	18,864,448	18,926,976	26
8,536,090	11,846,257	16,406,670	12,164,515	14,903,447	14,711,561	19,260,398	19,001,995	27
17,888,743	25,132,359	32,893,448	24,248,779	29,731,901	29,070,783	38,124,846	37,928,971	
23,543,604	34,280,669	35,624,074	31,068,852	28,567,545	31,100,156	36,240,041	39,268,712	28
22,780,458	32,347,265	33,085,350	29,483,806	27,773,668	30,726,933	34,730,037	38,096,416	29
46,324,062	66,627,934	68,709,424	60,552,658	56,341,213	61,827,089	70,970,078	77,365,128	
6,829	8,446	10,699	11,454	11,207	11,455	11,532		30
31,506	33,905	38,552	40,939	41,577	41,641	41,851		31
—	302,759	548,421	856,266	902,090	944,029	1,009,203		32
5	21,519	123,464	407,064	465,378	513,821	586,764		33
5,993,343	9,146,952	18,858,410	24,449,917	26,331,119	26,554,538	29,262,233	29,100,492	34
4,921,577	7,954,223	16,009,139	20,774,385	24,661,262	28,121,425	27,794,502	28,305,937	35
37,355,673	70,614,862	94,469,871	159,224,937	173,523,322	139,914,186	143,055,120	159,855,115	36
46,053,377	71,838,089	98,649,409	168,796,823	163,266,804	105,686,645	118,056,469	121,500,798	37
14,010,220	16,869,837	22,428,492	42,698,083	37,118,367	36,755,207	35,761,997	38,181,747	38
80,139,360	117,780,409	172,147,838	349,746,335	434,386,537	381,952,387	394,614,900	396,837,682	39
12,999	16,34	21,42	40,52	49,43	42,72	43,45	43,01	40
67,240,611	87,774,198	130,350,727	303,843,930	361,118,145	347,560,691	332,293,732	324,813,190	41
10,990	12,18	16,22	35,20	41,09	38,88	36,58	35,20	42
83,277,642	122,861,250	339,702,502	785,866,611	528,283,199	463,652,436	434,452,341	369,233,926	43
13,49	17,01	42,27	91,05	60,11	51,86	47,83	40,01	44
392,269,680	474,941,487	936,987,802	3,041,529,587	2,902,482,117	2,902,347,137	2,888,827,237	2,819,610,470	45
125,226,702	134,899,435	321,831,631	792,660,963	561,603,133	480,211,336	435,050,368	461,827,195	46
267,042,978	340,042,052	615,156,171	2,248,868,624	2,340,878,984	2,422,135,801	2,453,776,869	2,417,763,275	

³ The figures for 1924 are subject to revision. ⁴ Active assets only. ⁵ Motor vehicles in 6 provinces numbered 2,130 in 1907.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—concluded.

	Items.	1871.	1881.	1891.	1896.	1901.
Provincial Finance—						
1	Revenue, Ordinary, Total....	\$ 6,090,783 ¹	7,853,698	10,693,815	11,286,792	14,074,991
2	Expenditure, Ordinary, Total..	\$ 5,180,872 ¹	8,119,701	11,628,353	12,023,944	14,146,059
Note Circulation—						
3	Bank Notes.....	\$ 20,914,637	28,516,692	33,061,042	31,456,297	50,601,205
4	Dominion Notes.....	\$ —	—	16,176,316 ²	20,372,196 ²	27,893,509 ²
Chartered Banks—						
5	Capital paid-up.....	\$ 37,095,340	59,534,977	60,700,697	62,043,173	67,035,615
6	Assets.....	\$ 125,273,631	200,613,879	269,307,032	320,937,643	531,829,324
7	Liabilities (excluding capital and reserves).....	\$ 80,250,974	127,176,249	187,332,325	232,338,086	420,003,743
8	Deposits payable on demand..	\$ —	—	—	—	95,169,631
9	Deposits payable after notice..	\$ —	—	—	—	221,624,664
	Total deposits ²	\$ 56,287,391	94,346,481	148,396,968	193,616,049	349,573,327
Savings Banks—						
10	Deposits in Post Office.....	\$ 2,497,260	6,208,227	21,738,648	28,932,930	39,950,813
11	Government.....	\$ 2,072,037	9,628,445	17,661,378	17,866,389	16,098,144
12	Special.....	\$ 5,766,712	7,685,888	10,982,232	14,459,833	19,125,097
Loan Companies³—						
13	Assets.....	\$ 8,392,464	73,906,638	125,041,146	143,887,377	158,523,307
14	Liabilities to shareholders and public.....	\$ 8,392,464	71,965,017	123,915,704	143,296,284	158,523,307
15	Deposits.....	\$ 2,399,136	13,460,268	18,482,959	19,404,878	20,756,910
Trust Companies—						
16	Shareholders' assets.....	\$ —	—	—	—	—
17	Trust funds, liabilities.....	\$ —	—	—	—	—
Dominion Fire Insurance—						
18	Amount at risk, Dec. 31.....	\$ 228,453,784	462,210,968	759,602,191	845,574,352	1,038,687,619
19	Premium income for year.....	\$ 2,321,716	3,827,116	6,168,716	7,075,850	9,650,348
Provincial Fire Insurance—						
20	Amount at risk, Dec. 31.....	\$ —	—	—	—	—
21	Premium income for year.....	\$ —	—	—	—	—
Dominion Life Insurance—						
22	Amount at risk, Dec. 31.....	\$ 45,825,935	103,290,932	261,475,229	327,814,465	463,769,034
23	Premium income for year.....	\$ 1,852,974	3,094,689	8,417,702	10,604,577	15,189,854
Provincial Life Insurance—						
24	Amount at risk, Dec. 31.....	\$ —	—	—	—	—
25	Premium income for year.....	\$ —	—	—	—	—
Education—						
26	Enrolment.....	No. —	891,000	995,000	—	1,083,000
27	Average daily attendance.....	" —	—	—	—	669,000
28	No. of Teachers.....	" 13,559	18,016	23,718	—	27,126
29	Total Public Expenditure.....	\$ —	—	—	—	11,044,925

¹ Average, 1869-1872. ² Including amounts deposited elsewhere than in Canada from 1901-1924.³ Including Building Societies and Trust Companies (1871-1911). ⁴ The figures for 1924 are subject to revision.⁵ As at June 30.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—concluded.

1906.	1911.	1916.	1920.	1921.	1922.	1923.	1924.*	
23,027,122	40,706,948	50,015,795	92,653,023	102,030,458	116,156,699	117,423,174	-	1
21,169,868	38,144,511	53,826,219	88,250,675	102,569,515	112,874,954	131,299,100	-	2
70,638,870	89,982,223	126,691,913	228,800,379	194,621,710	166,466,109	170,420,792	166,136,765	3
49,941,426 ^b	99,921,354	176,816,006	305,806,288	271,531,162	240,429,548	240,862,014	226,002,628	4
91,035,604	103,009,256	113,175,353	123,617,120	129,096,339	125,456,485	124,373,293	122,409,504	5
878,512,076	1,303,131,260	1,839,286,709	3,064,133,843	2,841,782,079	2,638,776,483	2,643,773,986	2,701,427,011	6
713,790,553	1,097,661,393	1,596,905,337	2,784,068,698	2,556,454,190	2,364,822,657	2,374,308,376	2,438,711,000	7
165,144,569	304,801,755	428,717,781	653,862,869	551,914,643	502,781,234	523,170,930	511,218,736	8
381,778,705	568,976,209	780,842,383	1,239,308,076	1,289,347,063	1,191,637,004	1,197,277,065	1,198,246,414	9
605,968,513	980,433,788	1,418,035,429	2,438,079,792	2,264,586,738	2,120,997,030	2,107,606,111	2,130,621,760	
45,736,488	43,330,579	40,008,418	31,605,594	29,010,616	24,837,181	22,357,268	24,330,486	10
16,174,134	14,655,564	13,570,009	10,729,218	10,150,181	9,879,653	9,247,121	9,185,377	11
27,399,194	34,770,386	40,405,037	53,118,053	58,576,775	53,292,920	59,327,961	64,194,326	12
232,076,447	389,701,988	70,872,297	90,413,261	96,698,810	102,462,090	104,858,626	-	13
232,076,447	389,701,988	70,872,297	90,413,261	95,281,122	100,400,266	104,858,626	-	14
23,046,194	33,742,513	8,987,720	15,257,840	15,868,926	16,910,558	15,832,368	-	15
-	-	7,826,943	10,224,252	10,237,930	10,353,243	10,926,695	-	16
-	-	47,162,220	66,700,344	87,811,965	101,049,886	113,259,335	-	17
1,443,902,244	2,279,868,346	3,720,058,236	5,969,872,278	6,020,513,832	6,348,637,436	6,713,750,805	-	18
14,687,963	20,575,255	27,783,852	50,527,937	47,312,564	48,168,310	50,218,192	-	19
-	-	849,915,678	1,054,105,011	1,269,764,435	1,036,200,959	975,830,274	-	20
-	-	3,902,504	5,216,795	5,545,549	4,890,627	4,864,790	-	21
656,260,900	950,220,771	1,422,179,632	2,657,025,493	2,934,843,848	3,171,388,996	3,433,489,876	-	22
22,364,456	31,619,626	48,093,105	90,218,047	99,015,081	107,104,091	117,811,926	-	23
-	-	348,097,229	174,740,215	222,871,178	175,380,201	189,661,364	-	24
-	-	5,311,003	3,282,669	4,389,008	4,329,716	3,350,879	-	25
1,173,009	1,356,879	1,622,351	1,812,618	1,869,643	1,950,000	2,172,200	-	26
743,496	870,801	1,140,793	1,237,146	1,335,454	1,400,000	-	-	27
32,250	40,516	50,307	55,733	56,607	59,312	60,438	-	28
16,368,244	37,971,374	57,362,734	76,835,089	112,976,543	114,741,249	121,494,737	-	29

NOTE.

In the foregoing Summary, the statistics of immigration, fisheries (1871-1916), trade, shipping, the Post Office, the public debt, revenue and expenditure and the Post Office and Government Savings Banks relate to the fiscal years ended June 30 up to 1906, and from that on to the years ended March 31. Agricultural, dairying, fisheries (1920-24), mineral, manufacturing, banking, insurance, loan and trust companies statistics relate to the calendar years and railway statistics to the years ended June 30, 1871-1916, and to the calendar years 1920-1924. Canal statistics are those of the navigation seasons. The telegraph statistics relate to the fiscal years for Government lines and to the calendar years for other lines.

ERRATA.

- P. 124. For "Smith Falls" read "Smith's Falls".
P. 124. For "Cap Magdeleine" read "Cap de la Madeleine".
P. 181. For "VII.—Production" read "V.—Production".
P. 181, line 40. For "1920 and 1921" read "1921 and 1922".
P. 439. For "\$162,502,365" (telephones, cost of property and equipment, 1923)
read "\$179,002,152".
P. 441. For "VIII.—Trade and Commerce" read "VI.—Trade and Commerce".
P. 565, line 5. For "20,812,419" read "29,812,419".
P. 891, Table 2. For "23" (no. of institutions in Nova Scotia) read "24".

I.—PHYSICAL CHARACTERISTICS OF CANADA.

I.—GEOGRAPHICAL FEATURES.

1.—General Description.

Situation.—The Dominion of Canada comprises the whole northern half of the North American continent except the United States territory of Alaska, and Labrador, a dependency of the island colony of Newfoundland. It is bounded on the west by the Pacific ocean and Alaska, the boundary with which was in part determined by the award of the Alaska Boundary Tribunal signed at Washington, Oct. 20, 1903; on the south by the 49th parallel, the Great Lakes, the St. Lawrence river and additional lines set out by the Ashburton Treaty, signed Aug. 9, 1842; and on the east by the Atlantic ocean, the gulf of St. Lawrence, the undefined Labrador boundary and Davis strait. Northern boundaries have yet to be fixed by further exploration, but cape Columbia in north latitude $83^{\circ} 5'$ is the most northerly known point of land in the Dominion. The southernmost point is Middle island in lake Erie, in north latitude $41^{\circ} 41'$, while from east to west the Dominion extends from about west longitude 57° —the approximate boundary with Newfoundland—to west longitude 141° , the boundary with Alaska. Canadian territory thus extends over 84° of longitude and 42° of latitude.

Area.—The area of the Dominion (including an estimate of 500,000 square miles for the provisional district of Franklin) is 3,729,665 square miles, a figure which may be compared with that of 3,743,529 square miles for the United States and its dependent territories, 3,776,700 the total area of Europe, 2,974,581 the total area of Australia, 4,277,170 the total area of China inclusive of dependencies, 3,275,510 the area of Brazil, 1,802,577 the area of India, 121,633 the area of the United Kingdom and 13,424,519, the total area of the British Empire. By comparison with the last two figures Canada is seen to be over 30 times as large as the United Kingdom and to comprise almost 28 p.c. of the total area of the British Empire.

Political Subdivisions.—Canada is divided from east to west into the following provinces:—the Atlantic Maritime provinces of Prince Edward Island, Nova Scotia and New Brunswick, all three comparatively small in area; Quebec, covering a strip south of the St. Lawrence and the whole territory north of the St. Lawrence and east of the Ottawa to Hudson strait; Ontario, extending northward from the Great Lakes to Hudson bay; Manitoba, Saskatchewan and Alberta, the provinces of the interior continental plain, extending from 49° to 60° north latitude; and British Columbia, the province of the western mountain and Pacific coast region, also extending from 49° to 60° . North of the 60th parallel of latitude, the country is divided into the Yukon Territory and the Northwest Territories, the latter area composed of the provisional districts of Mackenzie, Keewatin and Franklin. In actual area the three Maritime provinces, covering a total land area of 51,163 square miles, make up but 1.4 p.c. of the total land area of the country. Quebec, the largest in area of all the provinces, and Ontario cover 19.45 and 10.15 p.c. of the country's aggregate land area respectively. The four western provinces, taken in order as one proceeds west, constitute 6.4, 6.7, 7.0 and 9.8 p.c., the Yukon 5.7 p.c., Franklin 13.8 p.c., Keewatin 5.7 p.c. and Mackenzie 13.9 p.c. of the land area of the Dominion. A brief description of each of the provinces is appended.

Prince Edward Island.—This, the smallest province of the Dominion, lies at the south of the gulf of St. Lawrence and is separated from the mainland of the continent by Northumberland strait. It is 150 miles in length and varies from 4 miles to 30 in width, covering an area of 2,184 square miles, some 200 square miles more than the state of Delaware and slightly more than half the area of the island of Jamaica in the British West Indies. Its rich red soil and red sandstone formations make up a distinctive and even topography, no point in the island attaining a greater altitude than 311 feet above sea level. A climate tempered by the surrounding waters of the gulf and yet free from the rigours of Atlantic storms, combined with numerous rivers, sheltered harbours and rolling plains, offers great inducements to the pursuit of agriculture and of fishing. The province is noted for its predominance in the fox-farming industry, its lobster canneries, and its production of oats and potatoes.

Nova Scotia.—The province of Nova Scotia is 386 miles in length by from 50 to 100 miles in width, a long and rather narrow strip of land lying parallel to the Maine and New Brunswick coast and joined to the latter by the isthmus of Chignecto. It includes at its north the island of Cape Breton, which is separated from the mainland by the strait of Canso. The total area of the province is 21,428 square miles, a little over 2,000 square miles less than the combined area of Belgium and Holland, with which Nova Scotia may very well be compared as to climate, natural resources and accessibility. Cape Breton island, at the mouth of the gulf of St. Lawrence and sheltering Prince Edward Island from the Atlantic, is roughly 100 miles in length with an extreme breadth of 87 miles, its area of 3,120 square miles enclosing the salt water lakes of Bras d'Or, connected with the sea at the north by two natural channels and at the south by the St. Peter's ship canal. The ridge of mountainous country running through the centre of the Nova Scotian mainland divides it roughly into two slopes, that facing the Atlantic being generally rocky, barren and open to the sweep of Atlantic storms, while the other, facing the bay of Fundy and the gulf of St. Lawrence, consists for the most part of arable and fertile plains and river valleys, and is noted for its general farming and fruit farming districts. The Atlantic coast is deeply indented with numerous excellent harbours.

New Brunswick.—With a total area of 27,985 square miles, New Brunswick may be compared to Scotland with its area of 30,405 square miles. The conformation of the province is also rather similar to that of Scotland, for the country, although not mountainous, is diversified by the occurrence of a great number of low hills and valleys. While New Brunswick is essentially a part of the mainland, the bay of Chaleur at the north, the gulf of St. Lawrence and Northumberland strait at the east, the bay of Fundy at the south and Passamaquoddy bay at the south-west provide the province with a very extensive sea coast. Although larger in area than Nova Scotia, New Brunswick does not cover as many degrees of latitude as does the former, its most southern point being a little south of 45° north latitude and its most northern a little north of 48°, while Nova Scotia extends roughly from the 43rd to the 47th parallel. To its southwest is a group of islands belonging to the province, the most important of which are Grand Manan, Campobello, and the West Isles. The soil of these islands, similar to much of that on the mainland, is generally fertile, but only a small proportion of it is under cultivation. New Brunswick has been well called the best watered country in the world; numerous rivers provide access to extensive lumbering areas in its interior and to many of the most attractive hunting and fishing resorts in the Dominion.

Quebec.—Quebec might with considerable accuracy be included among the Maritime provinces, for the gulf of St. Lawrence is really a part of the Atlantic, while salt water washes the coasts of the province for many miles on its northern and western borders. Besides including a narrow strip of land between the St. Lawrence and the international and New Brunswick boundaries, Quebec extends northward from the St. Lawrence and Ottawa rivers to Hudson strait, covering over 17° of latitude and an area of 706,834 square miles. The combined areas of France, Germany, Sweden and Italy are some 7,000 square miles less than the area of Quebec. Apart from its importance as the threshold of Canada and the gateway through which ocean navigation must pass on its way to the interior of the continent, Quebec is also noted for its natural resources. The untold timber limits of its northern areas form the basis for a great pulp and paper industry of the present and the future. Its rivers, many of them as yet comparatively unknown, may be harnessed to supply over one-third of the electric power available in Canada. Its mineral deposits, particularly those of asbestos, have long been known for their quality and extent, and the fisheries of the St. Lawrence river and gulf are equally familiar. Agriculturally, the climate and soil of the St. Lawrence shores and the plains of the Eastern Townships make the province eminently fitted for general farming operations.

Ontario.—The province of Ontario is the section of the Dominion contained between the great international lakes and Hudson bay and between the western boundary of Quebec and the eastern limits of Manitoba. Its most southern point is in north latitude 41° 41' and its most northern in north latitude 56° 48'. The total area comprised within its limits is 407,262 square miles, of which its water area of 41,382 square miles forms the unusually large percentage of 10·16. The province is a little more than 8,000 square miles less in area than are France and Germany together, and when compared with the states to the south, Ontario is found to be almost equal in extent to the combined area of the six New England states, New York, New Jersey, Pennsylvania, Ohio, Indiana, Illinois, Michigan, and Wisconsin. Many varieties of climate and soil are encountered, from the distinctively southern conditions found along the shores of lake Erie to the infinitely diverse ones of Hudson and James bay. Ontario, of all the provinces of Canada, is the centre of the country's manufacturing life, owing to its abundant water power resources and its proximity to the coal fields of Pennsylvania, but the many natural resources of its rural districts are not on this account neglected. Mining in the Sudbury, Cobalt and Porcupine districts is a thriving industry, the nickel coming from the Sudbury field amounting to three-fourths of the world's consumption; fruit farming in the Niagara district and general farming throughout the entire central part of the province are carried on extensively under unusually favourable conditions, while timber and furs are the most important products of more northern parts.

Manitoba.—Manitoba, the most easterly of the prairie provinces and also the oldest in point of settlement, extends roughly from a line joining the west coast of Hudson bay and the lake of the Woods to a line approximating closely to the 102nd meridian west from Greenwich. On the north and south it is bounded by the 60th and 49th parallels of latitude respectively. The total area of Manitoba is 251,832 square miles. This area may be compared to that of the United Kingdom with its area of 121,633 square miles, and Manitoba is seen to be 8,566 square miles greater than twice the total area of the British Isles. The province is typically

an agricultural one, its southern plains being specially adapted to this form of industry. Its northern districts, with a topography very different from that of its prairies, are of importance in the production of copper ore and of timber products.

Saskatchewan.—The central prairie province, contained within the western boundary of Manitoba, the 49th and 60th parallels of latitude, and the 110th meridian, covers an area of 251,700 square miles, but slightly less than that of Manitoba, and greater by 5,000 square miles than the combined areas of the United Kingdom and Norway. The country consists for the most part of the open rolling prairie at an average altitude of 1,500 feet above sea-level, while in the north it assumes a more broken aspect and is as yet but slightly developed. The climate is quite different from that of eastern Canada, with less precipitation and perhaps slightly more severe features than are encountered in many other parts of the country, but it is nevertheless most favourable to plant and animal growth. The northern districts are abundantly watered by lakes and rivers and are rich in coal and timber resources.

Alberta.—Lying between Saskatchewan on the east and the Rocky mountains and the 120th meridian on the west, and bounded on the north and south by the Northwest Territories and the United States respectively, is the province of Alberta. Its area is slightly greater than that of Saskatchewan or Manitoba, comprising a total of 255,285 square miles, a little more than the combined areas of Germany and Bulgaria. Formerly an almost exclusively ranching country, it has now become a great wheat producing region, the frontier of the grain growing area now approximating to the line of the foot-hills of the Rockies. In the southwest, considerable coal and oil mining are carried on; lumbering is important in the more mountainous western parts and in the north, where some ranching is still pursued in the less populous sections. The climate of Alberta is a particularly favourable one, less severe in summer than more eastern parts of the country and tempered in winter by the "Chinook" winds from the Pacific.

British Columbia.—The province of British Columbia is in some respects the most favoured part of Canada. Within its boundaries are reproduced all the varied climates of the Dominion and almost every natural feature, while some of its climatic and geographical conditions are peculiar to the province. Extending from the Rockies to the Pacific and from the 49th to the 60th parallel of latitude, its limits contain an area of 355,855 square miles, more than three times the area of Italy, slightly less than three times the area of the United Kingdom and but slightly less than the combined area of the United Kingdom, Norway and Italy. The many islands of the Pacific coast, notably Vancouver island, with an area of about 13,500 square miles, and the Queen Charlotte group, are included in the province and are noted for their temperate climate and abundant natural resources. The mines, timber limits, fisheries, and agricultural resources of the province are remarkable for their quality and extent.

Yukon and Northwest Territories.—The vast area of 1,449,300 square miles is included within the boundaries of Canada's northern subdivisions, the Yukon Territory and the three provisional districts of the Northwest Territories. This is almost twelve times the area of the United Kingdom, nearly half the area of the United States and more than the combined areas of the Argentine Republic and Chile in South America. Much of these northern regions is uninhabited, large areas of them even unexplored, but none the less they are of considerable potential economic value, owing to their possibilities in agricultural and pastoral production, to their mineral deposits such as the Yukon gold fields, as well as to their forest resources and their furs.

Summary of Land and Water Area.—For the convenience of the reader, the total land and water area of the Dominion, and its distribution into provinces and territories, is shown in Table 1.

1.—Land and Water Area of Canada, by Provinces and Territories, as in 1924.

Provinces.	Land.	Water.	Total Land and Water.
	sq. miles.	sq. miles.	sq. miles.
Prince Edward Island.....	2,184	—	2,184
Nova Scotia.....	21,068	360	21,428
New Brunswick.....	27,911	74	27,985
Quebec.....	690,865	15,969	706,834
Ontario.....	365,880	41,382	407,262
Manitoba.....	231,926	19,906	251,832
Saskatchewan.....	243,381	8,319	251,700
Alberta.....	252,925	2,360	255,285
British Columbia.....	353,416	2,439	355,855
Yukon.....	206,427	649	207,076
Northwest Territories—			
Franklin.....	500,000	—	500,000
Keewatin.....	205,973	6,851	212,824
Mackenzie.....	501,953	27,447	529,400
Total.....	3,603,909	125,756	3,729,665

The water area is exclusive of Hudson bay, Ungava bay, the bay of Fundy, the gulf of St. Lawrence and all other tidal waters, excepting that portion of the river St. Lawrence which is between Pointe-des-Monts and the foot of lake St. Peter, in Quebec.

2.—Physiography.

Topography.—The topographic features of the present surface of the American continent admit of its division, in Canada, into several physiographic provinces. The exposed surface of the old pre-Cambrian continent forms one of the largest divisions and has been called the Canadian Shield, the Archæan Peneplain, and in its southern portion, the Laurentian Highland. The mountainous country of the west constitutes the Cordilleras, while the mountains of eastern United States, in their continuation across the border, form the Appalachian highlands of eastern Canada. The Great Plains, with various subdivisions, occupy the area between the mountainous area of the west and the great, roughened surface of the Canadian Shield. The St. Lawrence lowland lies between the Laurentian and Appalachian highlands. Within the borders of the Canadian Shield an area on the southern margin of Hudson bay has been referred to as the “clay belt.” It occupies a part of the basin that was submerged during the glacial period and covered with a coating of clay which smoothed over its inequalities and concealed most of the underlying rocks. Since its emergence the surface has been but slightly altered by drainage channels cut across it.

Canadian Shield.—The portion of the pre-Cambrian continent whose exposed surface still forms a large part of Canada, has an area of about two and a half million square miles. Its northern border crosses the Arctic archipelago and the eastern lies beyond Baffin island and Labrador and reaches the depressed area occupied by the St. Lawrence river, a short spur or point crossing this valley at the outlet of lake Ontario to join the Adirondack mountains in New York. The southern boundary runs from the spur west to Georgian bay, skirts the north shore of lake Huron and sweeps almost entirely around the ancient depressed area occupied by lake Superior. The western edge, from the lake of the Woods and lake Winnipeg,

bears northwest to the western end of lake Athabaska and passes through the basins occupied by Great Slave and Great Bear lakes, reaching the Arctic ocean east of the Mackenzie River delta. In detail, the surface features of the Canadian Shield are irregular; but, viewed broadly, it has the conformation of a great plain, depressed toward the centre and in the north and slightly elevated along the eastern and southern borders, where it presents a somewhat steep outward slope. The general elevation in the eastern portion is under 2,000 feet, and over the larger part of the plain is about 1,000 feet. The highest portion is along the northeastern margin where it presents a steep face to the sea, rising to a maximum altitude of about 6,000 feet.

Appalachian Region.—The continuation of the Green mountains of Vermont into Canada may be traced in the Notre Dame mountains, which approach the St. Lawrence below Quebec and, continuing with more easterly trend, form the highland of the Gaspé peninsula. Over a large part of the region, these hills hardly attain the dignity of mountains, but peaks rising 3,500 feet above the nearby coast are found in the Gaspé peninsula. The continuation of the White mountains of New Hampshire is found in the highlands of Maine and New Brunswick, the continuity being shown quite plainly by the rock-folding and other evidences of the great earth movements which caused the topography. An additional ridge apparently forms the present province of Nova Scotia, and although the highlands of that province in few places rise to elevations greater than 1,500 feet, the rock structure indicates that it was a mountainous country at no very remote geological period.

St. Lawrence Lowlands.—The southern interior of the continent consists of a plain of low relief, bordered on the east by the Appalachian mountains, on the west by the Cordilleran mountain systems, and on the north by the Laurentian plateau. This plain, in its Canadian portion, is known as the St. Lawrence lowlands, and extends from a short distance below Quebec city to lake Huron, with a length of 600 miles and an area of 35,000 square miles. To the northeast it becomes reduced in width, and in the vicinity of Quebec is represented by a narrow plateau or shelf on each side of the St. Lawrence river. The triangular area beyond, in which is the island of Anticosti, is structurally related to the central lowlands. The St. Lawrence lowlands may be divided into three sections: (1) the St. Lawrence river plain, separated from (2) the Eastern Ontario basin, by a point of crystalline rocks, and (3) the Ontario peninsula, a slightly more elevated plain whose eastern border is a steep escarpment, the eastern outcrop of a heavy limestone bed which underlies the western peninsula.

Great Plains.—A great area, including many diverse features, lies to the east of the Cordilleras. The portion that is included under the term Great Plains extends from the southwestern edge of the ancient surface forming the Canadian Shield, to the eastern edge of the mountainous region of the Cordilleras. In the belt traversed by the railway lines a three-fold division into prairie steppes, rising one above the other, is clearly recognizable, though the divisions are not distinguishable in the region farther north to which the term prairie is not applicable. For the purpose of description, these three divisions are adopted and a fourth is added for the broken hilly country of the foot-hills. The first or eastern division comprises the plain lying between the Canadian Shield and the plateau formed of Cretaceous sediments; the second extends from the edge of this plateau westward to the erosion remnants of former Tertiary deposits; and the third stretches from this line westward to the foot-hills. North of the prairie country these distinctions are less noticeable, and divisions two and three become merged into one.

Cordilleran Region.—The western part of the American continent is more or less mountainous. The Andean chain, which extends throughout the length of South America and broadens out in the United States and in Canada, has an average width of over 500 miles. This region, covering about 600,000 square miles in Canada, is the most elevated in the Dominion, many of the summits reaching heights of 10,000 feet, with occasional peaks over 13,000 feet above sea level. The mountainous tract forming the Cordilleras can be divided broadly into three parallel bands; a series of plateaus and mountains, comprised in the Columbia, Interior, Cassiar and Yukon systems forming the central part, referred to as the Central Belt; another series of parallel ridges east of the central plateaus, formed of fault rocks and folds and including the Rocky and Arctic systems, known as the Eastern Belt; and a third division between the plateau country and the Pacific, composed of the Pacific and Insular systems, called the Western Belt.

Following is a list of the principal named Canadian Cordilleran peaks exceeding 11,000 feet in elevation:—

Name.	Elevation.	N. Lat.		W. Long.		Range.
	Ft.	°	'	°	'	
Alberta—						
Alberta.....	11,874	52	14	117	36	Rocky Mts.
Alexandra ¹	11,214	51	59	117	12	"
Assiniboine ¹	11,870	50	56	115	42	"
Athabaska.....	11,452	52	07	117	11	"
Coleman.....	11,000	52	06	116	55	"
Columbia ¹	12,294	52	09	117	27	"
Deltaform ¹	11,235	51	18	116	15	"
Diadem.....	11,060	52	19	117	00	"
Forbes.....	11,902	51	48	116	56	"
Fryatt.....	11,026	52	33	117	54	"
Hector.....	11,135	51	34	116	15	"
Hungabee ¹	11,457	51	20	116	17	"
Joffre ¹	11,316	50	32	115	12	"
King Edward ¹	11,400	52	10	117	30	"
Kitchener.....	11,500	52	13	117	19	"
Lyell ¹	11,495	51	58	117	06	"
Lefroy ¹	11,230	51	22	116	17	"
Lunette ¹	11,150	50	52	115	39	"
Sir Douglas ¹	11,174	50	43	115	20	"
Snow Dome ¹	11,340	52	11	117	19	"
Stutfield.....	11,320	52	15	117	29	"
Temple.....	11,636	51	21	116	15	"
The Twins.....	11,675	52	13	117	12	"
	12,085					
Victoria ¹	11,365	51	23	116	18	"
Wilson.....	11,000	51	58	116	45	"
Woolley.....	11,170	52	18	117	25	"
British Columbia—						
Bush.....	11,000	54	00	120	15	Rocky Mts.
Bryce.....	11,507	52	03	117	20	"
Clemenceau.....	12,001	—	—	—	—	"
Chown.....	11,500	53	26	119	26	"
Delphine.....	11,076	50	28	116	25	Selkirk Mts.
Fairweather ²	15,300	58	54	137	31	St. Elias Mts.
Farnham.....	11,342	50	29	116	27	Selkirk Mts.
Farnham.....	11,676	51	12	116	24	Rocky Mts.
Goodsir.....	11,113	51	09	117	25	Selkirk Mts.
Hasler.....	11,051	51	22	116	18	"
Huber.....	11,217	50	24	116	32	Rocky Mts.
Jumbo.....	11,226	50	36	115	24	"
King George.....	11,240	53	05	119	07	"
Resplendent.....	12,972	53	07	119	08	"
Robson.....	12,860	58	59	137	30	St. Elias Mts.
Root ²	11,013	51	09	117	24	Selkirk Mts.
Selwyn.....	11,000	54	00	120	15	Rocky Mts.
Sir Alexander.....	11,590	51	39	117	52	Selkirk Mts.
Sir Sandford.....	11,160	51	11	116	20	Rocky Mts.
The Helmet.....	11,101	53	08	119	16	"
Whitehorn.....						

¹These peaks are on the interprovincial boundary between Alberta and British Columbia.

²These peaks are on the boundary between British Columbia and Alaska.

Name.	Elevation.	N. Lat.		W. Long.		Range.
	Ft.	°	'	°	'	
Yukon¹—						
Alverstone.....	14,493	60	21	139	02	St. Elias Mts.
Augusta.....	14,070	60	18	140	28	"
Baird.....	11,375	60	19	140	31	"
Badham.....	12,625	60	38	139	47	"
Cook.....	13,754	60	10	139	59	"
Craig.....	13,250	—	—	—	—	"
Hubbard.....	14,950	61	16	140	53	"
Jeannette.....	11,700	60	20	140	43	"
King.....	17,130	60	35	140	39	"
Logan.....	19,850	60	35	140	21	"
Lucania.....	17,147	61	01	140	28	"
Malaspina.....	12,150	60	19	140	34	"
McArthur.....	14,400	60	36	140	13	"
Newton.....	13,811	60	19	140	52	"
St. Elias.....	18,008	60	18	140	57	"
Steele.....	16,644	61	06	140	19	"
Strickland.....	13,818	61	14	140	45	"
Vancouver.....	15,696	60	21	139	42	"
Walsh.....	14,498	61	00	140	00	"
Wood.....	15,885	61	14	140	31	"

¹These peaks are on or near the Yukon-Alaska boundary.

NOTE.—The highest mountain east of the Rockies, with the exception of the Torngats in Labrador, peaks of which exceed 6,000 feet, is Tabletop mountain (recently re-named Mount Jacques Cartier by the Geographic Board of Canada), in lat. 48° 60', long. 65° 56', Gaspé district, Quebec, the summit of which is 4,350 feet above sea level.

3.—Rivers and Lakes.

General.—The waterways of Canada constitute not only one of its most remarkable geographic features but one of the most vital elements of its national existence. The water area of 125,756 square miles is unusually large, constituting almost 3½ p.c. of the total area of the country, whereas the water area of the United States forms but slightly more than 1½ p.c. of its area. The Great Lakes, with the St. Lawrence river, form the most important system of waterways on the continent and one of the most notable fresh water transportation routes in the world. Their value in facilitating the cheap and speedy shipment of grain from the prairie provinces cannot be overestimated. These lakes never freeze over, but usually most of their harbours are closed by ice about the middle of December and remain frozen over until the end of March or the beginning of April.

Drainage Basins.—The great drainage basins of Canada are the Atlantic (554,000 square miles), the Hudson bay (1,486,000 square miles), the Arctic (1,290,000 square miles), the Pacific (387,300 square miles) and the gulf of Mexico (12,365 square miles). Table 2 indicates the drainage areas of the more important rivers.

2.—Drainage Basins of Canada.

Drainage Basins.	Area Drained.	Drainage Basins.	Area Drained.
	Sq. miles.		Sq. miles.
Atlantic Basin.		Hudson Bay Basin.	
Hamilton.....	29,100	Koksoak.....	62,400
Miramichi.....	5,400	George.....	20,000
St. John.....	21,500	Big.....	26,300
St. Lawrence.....	309,500	Eastmain.....	25,500
Saguenay.....	35,900	Rupert.....	15,700
St. Maurice.....	16,200	Broadback.....	9,800
French.....	8,000	Nottaway.....	29,800
Nipigon.....	9,000	Moose.....	42,100
Ottawa.....	56,700	Abitibi.....	11,300
Lièvre.....	3,500	Missinaibi.....	10,600
Gatineau.....	9,100	Albany.....	59,800
		Kenogami.....	20,700
Total.....	554,000	Attawapiskat.....	18,700

2.—Drainage Basins of Canada—concluded.

Drainage Basins.	Area Drained.	Drainage Basins.	Area Drained.
Hudson Bay Basin—concluded.	Sq. miles.	Pacific Basin—concluded.	Sq. miles.
Winisk.....	24,100	Stikine.....	20,300
Severn.....	38,600	Nass.....	7,400
Hayes.....	28,000	Skema.....	19,300
Nelson.....	370,800	Fraser.....	91,700
Winnipeg.....	44,000	Thompson.....	21,800
English.....	20,600	Nechako.....	15,700
Red.....	63,400	Blackwater.....	5,600
Assiniboine.....	52,600	Quesnel.....	4,500
Saskatchewan.....	158,800	Chilcotin.....	7,500
North Saskatchewan.....	54,700	Columbia.....	39,300
South Saskatchewan.....	65,500	Kootenay.....	15,500
Red Deer.....	18,300	Okanagan.....	6,000
Bow.....	11,100	Kettle.....	3,160
Belly.....	8,900	Pend d'Oreille.....	1,190
Churchill.....	115,500		
Kazan.....	32,700	Total.....	387,300
Dubawnt.....	58,500		
Total.....	1,486,000	Arctic Basin.	
Pacific Basin.		Backs.....	47,500
Yukon.....	145,800	Coppermine.....	29,100
Porcupine.....	24,600	Mackenzie.....	682,000
Stewart.....	21,900	Liard.....	100,700
Pelly.....	21,300	Hay.....	25,700
Lewes.....	35,100	Peace.....	117,100
White.....	15,000	Athabaska.....	58,900
Alsek.....	11,200	Total.....	1,290,000
Taku.....	7,600	Gulf of Mexico Basin.....	12,365

NOTE.—Owing to overlapping, the totals of each drainage basin do not represent an addition of the drainage areas as given. Tributaries and sub-tributaries are indicated by indentation of the names. The Gulf of Mexico basin is that part of the southern area of the prairie provinces drained by the Missouri and Mississippi rivers and their tributaries.

St. Lawrence River System.—Most important of the lakes and rivers of Canada is the chain of the Great Lakes with their connecting rivers, the St. Lawrence river and its tributaries. This chain is called the St. Lawrence River system. The Great Lakes, separating the province of Ontario from the United States and connected by a series of canals with the St. Lawrence river, allow vessels drawing not over 14 feet of water to proceed from the Atlantic ocean to the interior of the Dominion as far as Fort William and Port Arthur, twin cities situated on lake Superior, practically half way across the continent.

Other River Systems.—Apart from the St. Lawrence, the great waterway of the eastern half of the Dominion, other systems also merit some attention. The Saskatchewan river, for example, flowing eastward from the Rocky mountains to lake Winnipeg and thence northward by the Nelson river into Hudson bay, drains a great part of the plains of the western provinces. In the north, the Mackenzie river, with its tributaries the Slave, Liard, Athabaska and Peace rivers, follows the northerly slope of the Great Plain and empties into the Arctic ocean, its waters having traversed in all a distance of 2,525 miles. The Yukon river also, draining a great part of the Yukon territory, flows northward through Alaska into the Behring sea after a course of 1,765 miles. The Fraser, Columbia, Skena and Stikine rivers flow into the Pacific ocean after draining the western slopes of the mountains of British Columbia. Table 3 gives the lengths of the principal rivers with their tributaries, classified according to the course taken by their waters.

3.—Lengths of Principal Rivers and Tributaries in Canada.

Names.	Miles.	Names.	Miles.
Flowing into the Atlantic Ocean.		Flowing into Hudson Bay—concluded.	
Hamilton (to head of Ashuanipi).....	350	Kazan.....	455
Natashkwan.....	220	Dubawnt.....	580
Romaine.....	270	Severn.....	420
Moisie.....	210	Winisk.....	295
Ste. Marguerite.....	130	Attawapiskat.....	465
St. John.....	390	Albany (to head of Cat river).....	610
Miramichi.....	135	Moose (to head of Mattagami).....	340
St. Lawrence (to head of St. Louis).....	1,900	Mattagami.....	275
Manikuanan.....	310	Abitibi.....	340
Outarde.....	270	Missinaibi.....	265
Bersimis.....	240	Harricanaw.....	250
Saguenay (to head of Peribonka).....	405	Nottaway (to head of Waswanipi).....	400
Peribonka.....	280	Waswanipi.....	190
Mistassini.....	185	Rupert.....	380
Ashwamuchuan.....	165	Eastmain.....	375
Chaudière.....	120	Big.....	520
St. Maurice.....	325	Great Whale.....	365
Mattawin.....	100	Leaf.....	295
St. Francis.....	165	Koksoak (to head of Kaniapiskau).....	535
Richelieu.....	210	Kaniapiskau.....	445
Ottawa.....	685	George.....	365
North.....	70	Flowing into the Pacific Ocean.	
Rouge.....	115	Columbia (total).....	1,150
North Nation.....	60	Columbia (in Canada).....	465
Lièvre.....	205	Kootenay.....	400
Gatineau.....	240	Fraser.....	695
Coulonge.....	135	Thompson (to head of North Thompson).....	270
Dumoine.....	80	North Thompson.....	185
South Nation.....	90	South Thompson.....	120
Mississippi.....	105	Chilcotin.....	145
Madawaska.....	130	Blackwater.....	140
Petawawa.....	95	Nechako.....	255
Moira.....	60	Stuart.....	220
Trent.....	150	Skeena.....	335
Grand.....	140	Nass.....	205
Thames.....	135	Stikine.....	335
French (to head of Sturgeon).....	180	Alsek.....	260
Sturgeon.....	110	Yukon (mouth to head of Nisutlin).....	1,765
Spanish.....	153	Yukon (Int. boundary to head of Nisutlin).....	655
Mississagi.....	140	Stewart.....	320
Thessalon.....	40	White.....	185
Nipigon (to head of Ombabika).....	130	Pelly.....	330
Flowing into Hudson Bay.		Macmillan.....	200
Hayes.....	300	Lewes.....	338
Nelson (to lake Winnipeg).....	390	Flowing into the Arctic Ocean.	
Nelson (to head of Bow).....	1,660	Mackenzie (to head of Finlay).....	2,525
Red (to head of lake Traverse).....	355	Peel.....	365
Red (to head of Sheyenne).....	545	Arctic Red.....	230
Assiniboine.....	450	Liard.....	550
Souris.....	450	Fort Nelson.....	260
Qu'Appelle.....	270	Athabaska.....	765
Winnipeg (to head of Firesteel).....	475	Pembina.....	210
English.....	330	Slave.....	265
Saskatchewan (to head of Bow).....	1,205	Peace (to head of Finlay).....	1,065
North Saskatchewan.....	760	Finlay.....	250
South Saskatchewan (to head of Bow).....	865	Parsnip.....	145
Bow.....	315	Smoky.....	245
Belly.....	180	Little Smoky.....	185
Red Deer.....	385	Coppermine.....	525
Churchill.....	1,000	Backs.....	605
Beaver.....	305		

NOTE.—In the above table the tributaries and sub-tributaries are indicated by indentation of the names. Thus the Ottawa and other rivers are shown as tributary to the St. Lawrence, and the Gatineau and other rivers as tributary to the Ottawa.

The Great Lakes.—Table 4 shows the length, breadth, area, elevation above sea-level and maximum depth of each of the Great Lakes.

4.—Area, Elevation and Depth of the Great Lakes.

Lakes.	Length.	Breadth.	Maximum depth.	Area.	Elevation above sea-level.
	miles.	miles.	feet.	square miles.	feet.
Superior.....	383	160	1,180	31,810	602-29
Michigan.....	320	118	870	22,400	581-13
Huron.....	247	101	750	23,010	581-13
St. Clair.....	26	24	23	460	575-62
Erie.....	241	57	210	9,940	572-52
Ontario.....	180	53	738	7,540	246-17

Lake Superior, with its area of 31,810 square miles, is the largest body of fresh water in the world. As the international boundary between Canada and the United States passes through the centre of lakes Superior, Huron, Erie, St. Clair and Ontario, only half of the areas of these lakes given in the above statement is Canadian. The whole of lake Michigan is within United States territory. From the western end of lake Superior to the mouth of the St. Lawrence there is, with the aid of the canal system, a continuous navigable waterway. The total length of the St. Lawrence river from the head of the St. Louis river to Pointe-des-Monts, at the entrance of the gulf of St. Lawrence, is 1,900 miles. The tributaries of the St. Lawrence, several of which have themselves important tributaries, include the Ottawa river, 685 miles long, the St. Maurice river, 325 miles long, and the Saguenay (to head of Peribonka), 405 miles long.

Other Inland Waters.—In addition to the Great Lakes there are large bodies of inland water in other parts of Canada. Of these only the following principal lakes, with their respective areas, need be mentioned: in Quebec, lake Mistassini (975 square miles); in Ontario, lake Nipigon (1,730 square miles); in Manitoba, lake Winnipeg (9,459 square miles), lake Winnipegosis (2,086 square miles) and lake Manitoba (1,817 square miles); in Saskatchewan, Reindeer lake (2,436 square miles); in Alberta, lake Athabaska (2,842 square miles). All these are within the boundaries of the provinces as at present constituted, and are exclusive of lakes situated in the Northwest Territories, as, for instance, Great Bear lake (11,821 square miles) and Great Slave lake (10,719 square miles) in the district of Mackenzie.

Table 5 gives a list of the principal lakes of Canada by provinces, with the area of each in square miles. The table corresponds with the delimitation of the provinces as altered by the Boundary Extension Acts, 1912 (2 Geo. V, cc. 32, 40 and 45).

5.—Areas of Principal Canadian Lakes by Provinces.

Names of Lakes.	Areas.	Names of Lakes.	Areas.
	Square Miles.		Square Miles.
Nova Scotia—		Ontario—	
Bras d'Or.....	230	Abitibi, portion in Ontario.....	331
Little Bras d'Or.....	130	Balsam.....	17
Total.....	360	Buckhorn.....	14
		Couchiching.....	19
		Dog.....	61
		Eagle.....	128
New Brunswick—		Erie, portion in Ontario.....	5,019
Grand.....	74	George, portion in Ontario.....	11
		Huron, including Georgian bay, portion in Ontario.....	14,331
Quebec—		La Croix, portion in Ontario.....	23
Abitibi, portion in Quebec.....	25	Lansdowne.....	98
Albanel.....	206	Long.....	75
Apiskigamish.....	392	Manitou, Manitou island.....	38
Ashuanipi.....	319	Mille Lacs, Lac de.....	104
Atikonak.....	331	Mud.....	13
Aylmer.....	8	Muskoka.....	54
Baskatong.....	17	Namakan, portion in Ontario.....	19
Burnt.....	56	Nipigon.....	1,730
Champlain, portion in Quebec.....	3	Nipissing.....	330
Chibougamau.....	138	Ontario, portion in Ontario.....	3,727
Clearwater.....	478	Panache.....	35
Evans.....	231	Pigeon.....	15
Expansé.....	59	Rainy, portion in Ontario.....	260
Gull.....	125	Rice.....	27
Grand Victoria.....	57	St. Clair, portion in Ontario.....	257
Great Long.....	245	St. Francis, river St. Lawrence, part.....	24
Indian House.....	306	St. Joseph.....	245
Ishiamikuagan.....	87	Saganaga, portion in Ontario.....	21
Kakabonga.....	65	Sandy.....	245
Kaniapiskau.....	441	Seul.....	392
Kipawa.....	117	Simcoe.....	271
Lower Seal.....	220	Scugog.....	39
Matapédia.....	16	Stony.....	19
Manuan.....	113	Sturgeon, English river.....	106
Mattagami.....	87	Sturgeon, Victoria county.....	18
Mégantic.....	14	Superior, portion in Ontario.....	11,178
Melville.....	1,298	Timagami.....	90
Memphremagog, part in Quebec.....	28	Timiskaming, part.....	52
Menihék.....	112	Trout, English river.....	134
Minto.....	235	Trout, Severn river.....	233
Mishikamua.....	612	Wanapitè.....	45
Mishikamats.....	122	Woods, lake of the, part in Ontario.....	1,325
Mistassini.....	975	Total.....	41,173
Nemiskau.....	56		
Nichikum.....	208	Manitoba—	
Norming.....	9	Atikameg.....	90
Obatogamau.....	56	Cedar.....	285
Olga.....	50	Cormorant.....	141
Ossokmanuan.....	131	Dauphin.....	200
Papineau.....	5	Dog.....	64
Patamisk.....	44	Ebb-and-flow.....	39
Payne.....	747	Etawney.....	625
Petitsikapau.....	94	Gods.....	319
Pipmaukin.....	100	Granville.....	392
Pletipi.....	138	Island.....	551
Quinze, Lac des.....	46	Kiskitto.....	69
Richmond.....	269	Kiskittogisu.....	122
St. Francis, Beauce county.....	13	Manitoba.....	1,817
St. Francis, river St. Lawrence, part.....	59	Moose.....	552
St. John.....	350	Namew, part.....	12
St. Louis.....	56	North Indian.....	184
St. Peter.....	130	Nuelin, part.....	76
Sandgirt.....	106	Playgreen.....	224
Simon.....	12	Reed.....	86
Timiskaming, part.....	65	Red Deer, west of lake Winnipegosis.....	86
Témiscouata.....	29	Reindeer, part.....	134
Thirty-one Mile.....	23	St. Martin.....	125
Two Mountains.....	63	Setting.....	58
Upper Seal.....	270	Shoal.....	102
Wakonichi.....	44	South Indian.....	1,531
Waswanipi.....	100	Swan.....	84
Whitefish.....	19	Todatara, part.....	156
Total.....	10,830	Waterhen.....	83

5.—Areas of Principal Canadian Lakes by Provinces.—concluded.

Names of Lakes.	Areas.	Names of Lakes.	Areas.
	Square Miles.		Square Miles.
Manitoba—concluded.		British Columbia—concluded.	
Wekusko.....	83	Lower Arrow.....	64
Winnipeg.....	9,459	Okanagan.....	135
Winnipegosis.....	2,086	Owikano.....	98
Woods, lake of the, part.....	60	Quesnel.....	147
Total.....	19,895	Shuswap.....	124
Saskatchewan—		Stuart.....	220
Amisk.....	111	Tacla.....	135
Athabaska, part.....	1,801	Tagish, part.....	91
Buffalo.....	281	Teslin, part.....	123
Candle.....	150	Upper Arrow.....	99
Chaplin.....	66	Total.....	2,439
Cree.....	406	Northwest Territories—	
Cumberland.....	166	Aberdeen.....	514
Doré.....	242	Aylmer.....	612
Île-à-la-Croise.....	187	Baker.....	1,029
Johnston.....	131	Clinton-Colden.....	674
Last Mountain.....	98	Dubawnt.....	1,654
Little Quill.....	70	Franklin.....	122
Manitou.....	67	Garry.....	980
Montreal.....	138	Gras, Lac de.....	674
Namew, part.....	54	Great Bear.....	11,821
Plonge, Lac la.....	383	Great Slave.....	10,719
Quill.....	163	Kaminurik.....	368
Red Deer, on Red Deer river.....	86	Macdougall.....	318
Reindeer, part.....	2,302	Maguse.....	490
Ronge, Lac la.....	343	Martre, Lac la.....	1,225
White Loon.....	97	Mackay.....	980
Witchikan.....	70	Nueltin, part.....	230
Wollaston.....	906	Nutarawit.....	343
Total.....	8,318	Pelly.....	331
Alberta—		Schultz.....	123
Athabaska, part.....	1,041	Thoulintoa.....	184
Beaver.....	89	Todatara, part.....	52
Biche, Lac la.....	125	Yathkyed.....	858
Buffalo.....	55	Total.....	31,301
Claire.....	404	Yukon—	
Lesser Slave.....	480	Aishihik.....	107
Pakowki.....	72	Atlin, part.....	12
Sullivan.....	94	Kluane.....	184
Total.....	2,360	Kusawa.....	56
British Columbia—		Laberge.....	87
Adams.....	52	Marsh.....	32
Atlin, part.....	331	Tagish, part.....	48
Babine.....	306	Teslin, part.....	123
Chilko.....	172	Total.....	649
Harrison.....	122	Canada.....	120,399
Kootenay.....	220		

4.—Islands.

The islands of Canada are among its most important geographic features. They include the numerous unsurveyed and little-known areas of the Arctic regions, the fringe of both large and small islands off the Pacific coast, those of the Maritime provinces and Quebec, both in the Atlantic ocean and the gulf of St. Lawrence, together with the islands of the Great Lakes and other inland waters. Of the Arctic islands, but little can be said. They are known to be of vast extent, Baffin, Victoria and Ellesmere, the three largest, being approximately 211,000, 74,000 and 76,600 square miles in area respectively, but Banks, North Devon, Southampton, North Somerset, Prince of Wales, Melville and Axel Heiberg are also of considerable size. Their economic possibilities, beyond scattered deposits of coal and other

minerals, have not been established. The Pacific coast islands, with the exception of Vancouver island and the Queen Charlotte group, are small and dot the western coast of British Columbia from Dixon entrance to the southern boundary of the province. Vancouver island is 285 miles long and from 40 to 80 miles broad, covering an area of about 13,500 square miles, the mountain range which forms its backbone rising again to form the Queen Charlotte islands farther north. These islands figure largely in the mining, lumbering and fishing industries of the west.

On the eastern coast of the Dominion are the island province of Prince Edward Island, the island of Cape Breton (an integral part of Nova Scotia), Anticosti and the Magdalen group, included in the province of Quebec, and the islands of Grand Manan and Campobello, part of the province of New Brunswick, in the bay of Fundy. Prince Edward Island is 2,184 square miles in area, Cape Breton, 3,120 and Anticosti of about the same extent. Fishing activities in these eastern islands are important, while agriculture in Prince Edward Island and mining in Cape Breton are among the chief occupations of the inhabitants.

Manitoulin island in lake Huron and the Thousand Island group in the St. Lawrence river, at its outlet from lake Ontario, are the more important islands of the inland waters.

II.—GEOLOGICAL FORMATION.¹

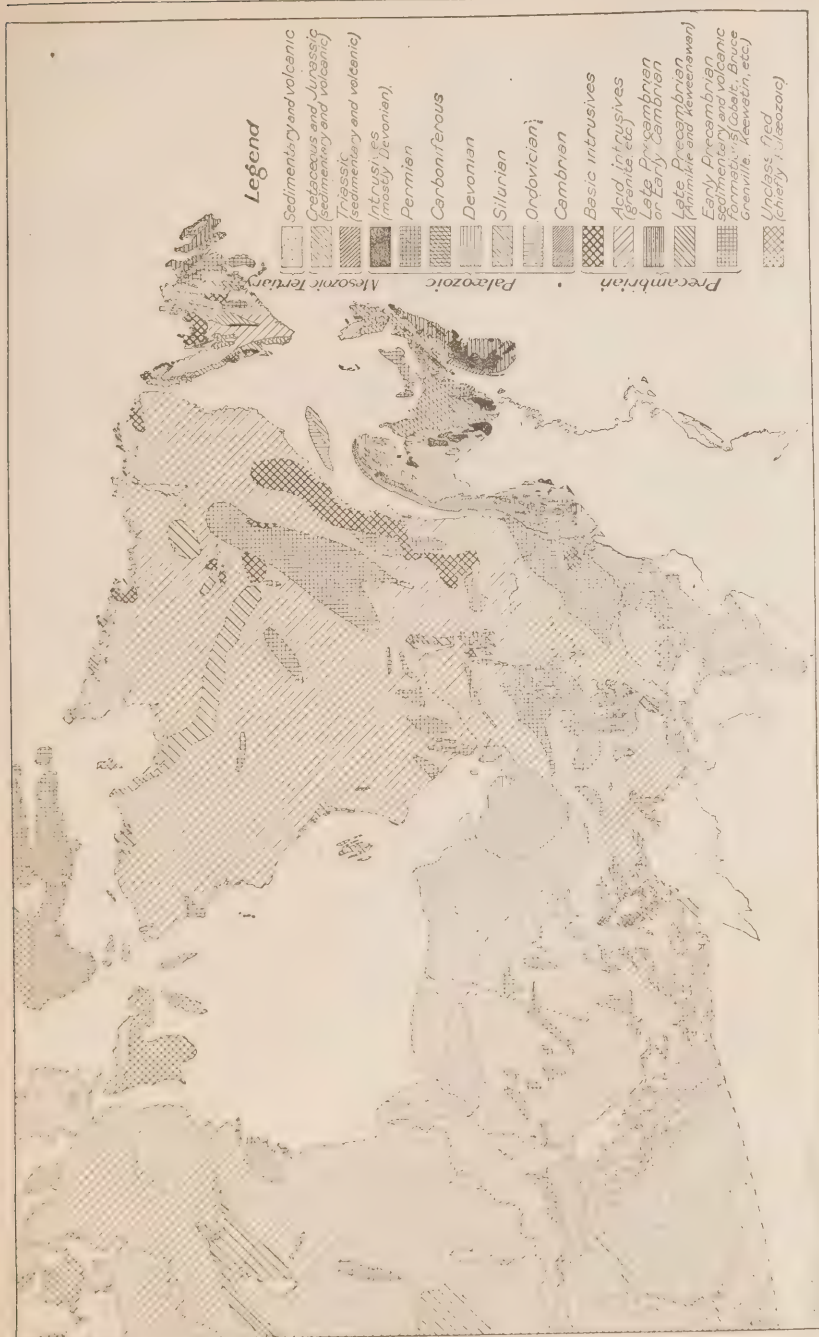
Introduction.—From the geological point of view, Canada's central and eastern parts are of extreme old age, forming probably the largest area of Archæan or pre-Cambrian rocks in the world. At the same time, comparatively recent geological events have rejuvenated the region, impressing upon it many of the characteristics of youth, as a result of which the Dominion presents impressive contrasts in geological structure and physical features.

When the officials of the Geological Survey commenced to study the geology of eastern Canada, they found that the more ancient and crystalline rocks, the nucleus or protaxis about which the remainder of the continent was built up, extended north-eastwards and north-westwards on each side of James bay and Hudson bay. The American geologist, Dana, called this Canadian Archæan with its spreading arms a V-formation, but when it became evident that the ancient rocks extended also along the north side of Hudson bay, the Viennese geologist, Suess, gave to this vast area the name of the Canadian Shield, a term which has been accepted by subsequent writers. In the centre of the Shield there was in early times a depression filled by a shallow sea and now occupied by Hudson bay.

A second Archæan protaxis is situated 500 miles south-west of the edge of the Shield, that of the Selkirk and Gold Range mountains in British Columbia. This is long, narrow, and somewhat interrupted, running from south-east to north-west, parallel to the coast. The *débris* resulting from the destruction of the mountainous Archæan areas piled up in the shallow seas around, and on their flanks and in the wide trough between them marine Palæozoic rocks were laid down. Later, Mesozoic sediments were deposited upon them, practically completing the outline of Canada and extending south into what is now the United States.

Together with this growth in area went the upheaval of mountains, first in Archæan times, when apparently the whole surface of the Shield was covered by great mountain chains, next at the end of the Palæozoic age, along the south-

¹Adapted from articles by R. W. Brock, M.A., LL.D., University of British Columbia, and Wyatt Malcolm, M.A., Dept. of Mines, Ottawa, in the Canada Year Book, 1921.



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eastern and south-western sides, and finally at the end of the Mesozoic era, when the Rocky mountains were elevated on the margin of the shallow interior sea. Outside of this area of mountain-building, the rocks are fairly level and undisturbed, showing comparatively stable conditions throughout the continent.

Process of Geological Development.—Since more than half of Canada is covered by Archæan or pre-Cambrian formations, these must first be considered. The lowest rocks are the Laurentian granites and gneisses, which latter, though once believed to be *sedimentary*, are now known to be deep-seated eruptive rocks, which pushed up as molten material into the cold rocks above, lifting them as domes and themselves solidifying slowly far below the surface. These great domes of gneiss and granite, known as batholiths, are the commonest structure of the Archæan region.

Though the Laurentian rocks are the lowest, they are not the oldest, as the Keewatin rocks were already cold and solid at the period when they were heaved upward upon the shoulders of the Laurentian. The Keewatin rocks also consist chiefly of eruptive rocks, lava flows and volcanic ash, now metamorphosed into greenstones and schists. With them are found in many places thick deposits of ordinary sediments, now changed into gneiss or mica-schist, together with the banded jasper and iron ore of the iron formation.

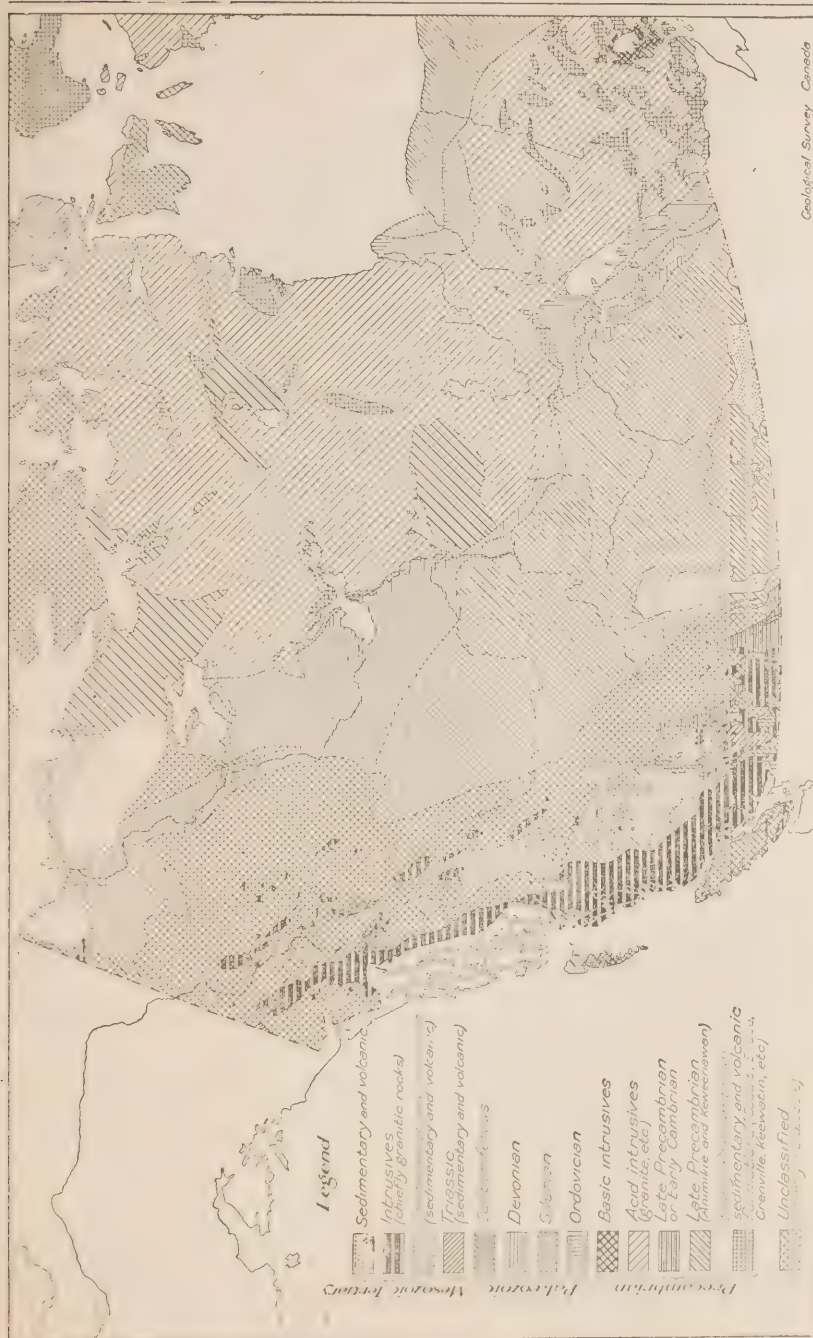
Much marble or crystalline limestone is also found in the Grenville series of the southern Archæan, which is probably of the same age as the Keewatin. During that period, thousands of feet of lava, ashes, mud and sand were laid down on a sea-bottom that has utterly vanished. This was followed by the eruption of the domes of gneiss, lifting the earlier rocks into great mountain ranges, which were afterwards worn down to stumps, disclosing their foundations of granite and gneiss enclosed in a rude network of Keewatin schist.

The next formation, the Huronian, consists of a great sheet of boulder clay or tillite, formed by wide-spread glaciers, and masses of water-formed sediments, now slate or quartzite or limestone. In many places the Huronian rocks still lie nearly flat on the worn surfaces of the older rocks, but in others they were caught in mountain-building operations and squeezed and rolled out into schists. The Animikie or Uppermost Huronian is also made up of sediments, very modern in appearance.

The Keweenawan is the concluding formation of the Canadian Archæan, resulting from another outburst of volcanic activity. Thousands of feet of lava, ash rocks, coarse sandstones and conglomerates were piled up on various parts of the old continent. Keweenawan intrusives are considered the source of the ores of silver, nickel and copper mined on a great scale in northern Ontario. Altogether, more than half of the Dominion owes its present configuration to forms shaped in the Archæan rocks, though overlaid and sometimes obscured by later activities.

Palæozoic formations are all well represented in Canada, limestones, shales and sandstones of its various ages (Cambrian, Ordovician, Silurian, Devonian and Carboniferous) contributing to the shaping of the country. These in many places lie almost undisturbed, but in far eastern Canada, where the Palæozoic ended with the Appalachian mountain-building period, they are crumpled into great folds or torn asunder with profound faults. The Carboniferous of the Atlantic coast is valuable for its important coal-beds.

The Mesozoic in its earlier formations (Triassic, Jurassic) is poorly represented in Canada, but its later formation, the Cretaceous, is of great importance, both for extent and economic features, its crumbling sandstones and shales underlying the prairies of western Canada and containing beds of coal at many places. During



GEOLOGY OF WESTERN CANADA.

the Laramie period, a transition era between the Mesozoic and the Tertiary, were elevated the Rocky mountains, the latest and therefore the highest of the mountain ranges of Canada.

By this time the continent was complete within its main outlines; but during the Tertiary, sediments were deposited in several small western basins, while in southern British Columbia volcanic eruptions covered thousands of square miles with lava or ashes. Thereafter the climate grew colder, and with the Pleistocene or Quaternary began the Glacial Period, which continued for a long time but was relieved by at least one inter-glacial period characterized by a warm climate. At the close of the Glacial Period the surface of the northern part of the continent had been profoundly modified, "the vast accumulations of loose materials, due to ages of weathering, being scoured away from the central parts of the glaciated areas, leaving bare, rounded surfaces of fresh rock, while nearer the edges of the ice-sheets, boulder clay was spread out or long loops of moraine were heaped up, blocking the valleys and transforming the whole system of drainage." During the subsequent thawing of the ice-sheets, the melting ice in the upper part of the valleys of the northward-flowing Canadian rivers formed glacial lakes in which sheets of silt or sand were deposited, forming what are now thousands of square miles of the most fertile lands of Canada. Also, as a consequence of the heavy load of ice, which at some points was two miles thick, the land sank some hundreds of feet, leaving thousands of square miles beneath the sea when the ice-sheets began to thaw. Relieved of its burden of ice, the sunken portions of the continent rose again, exposing wide belts of marine clay on the coastal plains. Many of the richest soils and the flattest plains of Canada owe their fertility and their smoothness to the process just described. Thus the geologically recent episode of the Ice Age "modified the old topography and hydrography of Canada, giving to one of the oldest lands under the sun its singularly youthful aspect."

Geological Divisions.—As a result of the process of geological development just described, the Canada of to-day may be divided into five main regions, each with distinctive characteristics of formation and present resources. A generally accepted division is as follows:—

1. The Appalachian or Acadian region, occupying the Maritime provinces and the mountainous south-eastern side of the province of Quebec.
2. The Canadian Shield or Laurentian Plateau, the vast upland surrounding Hudson bay and stretching through twenty degrees of latitude to the Arctic circle and in places four or five degrees beyond it.
3. The St. Lawrence Lowlands of southern Quebec and Ontario, extending south-west from the city of Quebec to the Detroit river.
4. The Interior Continental Plain, contained between the western edge of the Canadian Shield and the Rocky mountains.
5. The Cordilleran region, extending from the Rocky mountains to the Pacific coast.

In addition two other less important regions may also be noted:—1. The Arctic Archipelago, including the islands of the Arctic ocean north of Hudson bay, and 2. The Lowlands of James and Hudson bays. These last two regions, while distinct as to formation and peculiarities, are yet of insufficient importance and interest to warrant the further more detailed mention given to the five principal regions.

Appalachian Region.—The Appalachian region occupies the hilly part of southeastern Quebec and the Maritime provinces. Here, during remote geological ages the sedimentary beds of limestone, sandstone and shale that had been deposited beneath the sea were folded into mountain ranges, hardened, and intruded by igneous rocks. During long succeeding ages these mountains have been subdued, and little is left that may be regarded as mountains except the Notre Dame range of Quebec, with a general elevation of 1,000 to 2,000 feet and with peaks rising above 3,500 feet, the broken hilly country of the northwestern part of New Brunswick, a section of this province bordering the bay of Fundy and a central ridge in Nova Scotia.

In the ordinary processes of erosion, much of the loosened material resulting from rock decay was carried seaward, and in recent times glaciation denuded a great deal of the more elevated sections of country, leaving barely enough soil to support a forest growth.

In some places sediments have been deposited subsequently to the great folding processes of earlier ages; they are unaltered, easily attacked by weathering agencies and are overlain by an ample depth of soil. The soils of Prince Edward Island, the Annapolis-Cornwallis valley and other sections are derived from these sandstones and shales of later deposition, the shales producing the clayey constituents and the sandstones yielding the sand that renders the soil porous and tillable. Calcareous slates have in places such as in Carleton and York counties, New Brunswick, broken down into fertile soils. In eastern Quebec, sufficient soil has been retained in the valleys to render the land arable. The great fertility of the reclaimed marshes of Nova Scotia and New Brunswick is due to the fine silt deposited by the tides by which they were formerly submerged.

In Canada the Appalachian extension is found to possess many of the minerals which have placed some of the eastern States in the foremost rank of mineral and industrial districts of the world. Important deposits of coal, gypsum, and gold are mined in Nova Scotia. Of lesser but still considerable importance are the iron, stone and building materials; manganese, antimony, tripolite and barite are also mined, and some attention has been paid to copper. The principal minerals of New Brunswick are gypsum, iron, coal, stone for building purposes and grindstones, clays, antimony, manganese, mineral water and oil-bearing shales. Natural gas is also a commercial product. The chief asbestos mines of the world are situated in the southeastern part of the province of Quebec, where there are also important deposits of chrome iron ore, copper and pyrite. Iron ores and gold also occur.

St. Lawrence Lowlands.—The St. Lawrence lowlands consist of the generally level, arable land south of the Laurentian plateau. This lies on both sides of the St. Lawrence above Quebec, reaching south to the international boundary, occupies the eastern part of Ontario, east of a line running southward from a point about 50 miles west of Ottawa, and forms that portion of Ontario lying southwest of a line extending from Kingston to Georgian bay.

These lowlands are among the most fertile of Canada's agricultural sections. They are underlain by flat-lying shales and limestones which yield readily to weathering. The physiographic features are favourable, and the residual material derived from the decomposition of limestones and shales results in a fertile, calcareous, clayey soil. The loose surface deposits are of great depth, in places exceeding 200 feet.

The region was overridden by the great glacier, but the glaciation had apparently slight denuding effect on this part of the country, serving to mix the loose materials resulting from the weathering of the shales and limestones and contributing the potash-bearing ingredients transported from the granitic areas of the Laurentian plateau.

In its mineral deposits the area is very similar to the state of New York, its Palæozoic rocks containing frequent occurrences of petroleum, natural gas, salt, gypsum and other non-metallic minerals. In addition, clay products, cement and other building materials are produced in large quantities.

Laurentian Plateau.—North of the valley of the St. Lawrence, from Newfoundland to beyond the lake of the Woods, and enclosing Hudson bay like a huge V, is an area of pre-Cambrian rocks, estimated to cover 2,000,000 square miles, or over one-half of Canada.

The plateau is underlain by hardened sediments and igneous rocks. The latter are much more widespread than the former, however, and granitic types predominate. Considerable inequalities of surface have been augmented by glacial action and a further effect of glaciation was the denuding of much of this region of its soil. Generally speaking, therefore, the physiographic and soil conditions are not favourable to agricultural pursuits. Over a great part of the area, however, sufficient soil has been retained to support a forest growth, although insufficient for agriculture. Within the plateau there are some valleys where areas of softer rock have afforded a greater abundance of soil that has not been removed by glaciation, and beautiful cultivated fields lend a pleasing contrast to the surrounding forest. In places the sediments deposited in the basins of glacial lakes have reduced the inequalities of the surface and produced large level areas of arable land. Interesting examples of these are furnished by the Clay Belt of northern Ontario and Quebec, traversed by the Canadian National railway, and by the flat section of country along the main line of the Canadian Pacific railway a few miles north of Sudbury.

The rocks of this pre-Cambrian formation are remarkable for the variety of useful and valuable minerals they contain. Iron, copper, nickel, cobalt, silver, gold, platinum, lead, zinc, arsenic, pyrite, mica, apatite, graphite, feldspar, quartz, corundum, talc, actinolite, the rare earths, ornamental stones and gems, building materials, etc., are all found, and are, or have been, profitably mined. Most of the other minerals, both common and rare, that are used in the arts have been found. Diamonds have not been located, but from their discovery in glacial drift from this area, it is altogether probable that they occur.

A tongue of these pre-Cambrian rocks extends into New York state and supports some large and varied mineral industries. Another extension crosses over from Canada into Michigan, Wisconsin, and Minnesota. In it are located the Michigan copper mines and the great lake Superior iron ranges. Along the southern edge of the pre-Cambrian in Canada, there are the copper and gold deposits of Saskatchewan and Manitoba, the gold ranges of the lake of the Woods, the silver of Thunderbay, a succession of iron ranges occurring at intervals from Minnesota to the province of Quebec, the copper rocks of Michipicoten and Bruce Mines, the Sudbury copper-nickel deposits (probably the largest high-grade ore bodies in the world), the Montreal river and Cobalt silver areas, the world-famous Porcupine and other gold deposits, the corundum deposits of eastern Ontario, the magnetites of eastern Ontario and Quebec and their large apatite-mica deposits. In the far north, about Coronation gulf, are rocks that will warrant prospecting, since they bear native copper very similar to the great Michigan occurrences.

Interior Continental Plain.—The greater portions of Manitoba and Saskatchewan that lie outside of the pre-Cambrian and the province of Alberta are pre-eminently agricultural, the flat-lying shales and sandstones having weathered down into the clays and clay loams which have made the plains one of the great wheat

producing districts of the world. The greatest proportion of the surface deposits is derived from these underlying rocks. Some large stretches of the region, however, were submerged by glacial lakes in which fine silts and clays, carried down from the surrounding land and introduced by glacial streams, were deposited. Such is the very fertile Red River valley. This is a part of the bed of a great lake that extended from the Laurentian plateau west to the Manitoba escarpment; it reached southward into the United States and northward 100 miles beyond lake Winnipeg.

The sedimentary rocks which underlie the greater part of the Interior Plain are chiefly of Cretaceous age and contain coal, building stones, clays, some of them high grade, and cement materials. Natural gas over wide areas and under great pressure has been tapped in northern Alberta, and some oil has been encountered in the southwest. The lower sandstones of the Cretaceous along the Athabaska river, where they come to the surface, are for miles saturated with bitumen. These tar sands will probably average 12 p. c. in maltha or asphaltum. Recent prospecting has discovered oil at Pouce Coupé on the Peace river, and at Fort Norman, on the Mackenzie river, near the Arctic circle. At other points in the Devonian rocks of the Mackenzie basin oil indications occur. The lignites of the eastern plains are useful for local purposes, and highly bituminized coals are found as the mountains are approached. Vast areas are underlain by lignite beds in Saskatchewan and Alberta, and the reserves of bituminous coal in Alberta are enormous. Gold is found in a number of the rivers coming from the mountains. Gypsum is quarried in Manitoba and important deposits also occur in northern Alberta. Beds of salt have been discovered by drilling near McMurray, northern Alberta.

Cordilleran Region.—The Cordilleran belt in South America, in Mexico, and in the western States, is recognized as one of the greatest mining regions of the world, noted principally for its wealth in gold, silver, copper and lead. The Cordilleras stand unparalleled in the world for the continuity, extent and variety of their mineral resources. In Canada and in Alaska this belt maintains its reputation, although in both, for the greater part, it is unprospected. In Canada the belt has a length of 1,300 miles and a width of 400 miles. It is pre-eminently a great mining region. Its rocks range from the oldest formations to the youngest; vulcanism and mountain building processes have repeatedly been active. The chief products of its lode mines in Canada are copper, gold, silver, lead and zinc. The Yukon territory is noted for its production of placer gold and is now attracting attention with rich silver ores. In addition to these minerals there are, within the same region, enormous resources of coal of excellent quality, varying from lignite to anthracite, and conveniently distributed.

The surface of the region is generally mountainous, though the interior section is reduced to an elevated plateau. Agricultural pursuits are therefore limited to the valleys. In these there are numerous terraces composed of silt carried down by streams issuing from former glaciers, the latter acting as eroding agents on the underlying rocks. These valley deposits are fertile and are well adapted to fruit culture.

III.—SEISMOLOGY IN CANADA¹.

Seismology—the branch of science which treats of earthquakes—has received considerable attention in Canada during recent years. It has been generally recognized that earthquakes are frequent in regions of adjustment of strata and are characteristic of the newer mountain and coast regions where abrupt changes

¹Contributed by Ernest A. Hodgson, M.A., Seismologist, Dominion Observatory, Ottawa, Canada.

in level are present. Seismological researches, while recording their location, duration and intensity, seek to determine particular causes. They ascertain the physical properties of the earth's crust and interior as revealed by the peculiarities of the recorded waves after their passage through the earth. Instruments as developed by seismological research for the better recording of earth tremors are being used commercially in many ways, not the least important being for the mapping out of underground densities in order to locate minerals and oil without frequent and expensive borings.

During the years for which records are available, Canada has been but slightly affected by earthquakes. Historically, a record shows that the St. Lawrence valley was shaken by a great quake in 1663. In 1899, a great disturbance occurred in Alaska at Yukatat bay, very close to Canadian territory. Slight shocks are very occasionally experienced in British Columbia and along the drainage system from the Great Lakes to the sea, but no damage to property or loss of life has been caused within the past century. It may be said that no active fault lines of any importance are found in Canada.

At present five seismological stations, all maintained by the Dominion Government, are in active operation in Canada, and are situated at Halifax, Ottawa, Toronto, Saskatoon and Victoria. Two of these—at Toronto and Victoria—are under the Meteorological Branch of the Department of Marine and Fisheries, while the three remaining stations are controlled by the Dominion Observatory Branch of the Department of the Interior, with the assistance and co-operation of the universities at Halifax and Saskatoon.

The records for Toronto and Victoria are published from Toronto, whence monthly bulletins are issued to seismological observatories interested, giving full details of all quakes as registered. The records for Ottawa, Saskatoon and Halifax are published from Ottawa. Monthly bulletins are issued to about 230 seismological observatories interested giving full details of the quakes as registered. These are supplemented yearly by a publication giving the location of epicentres of all earthquakes of which any trace is registered at Ottawa. Data are gathered from all the reporting seismological stations of the world.

Regular research work in seismology is carried on at Ottawa where the full time of two seismologists is given to the work of earthquake study alone. The reports are issued in the publications of the Dominion Observatory, Ottawa.

The natural and instrumental data for each station are as follows:—

Halifax.—Lat., 44° 38' N.; Long., 63° 36' W.; Alt., 47.3 m. Substrata, carbonaceous slate. Equipment:—Small Mainka Pendulum Seismograph, Mechanical registration. Components N.S., E.W. Mass of each 139.3 kgm. Period of each, 10 sec. Damping ratio of each, 6:1. Magnification of each, about 60. Time is checked automatically each hour by signal from Western Union Telegraph and is to be depended on to one or two seconds.

Ottawa.—Lat., 45° 23' 38" N.; Long., 75° 42' 57" W.; Alt., 82 m. Substrata, boulder clay over limestone (Ordovician). Equipment:—(1) Bosch Horizontal Seismographs. Photographic registration. Independent components, N.S., E.W. Mass of each 200 gm. Period of each, about 5.5 sec. Damping ratios, N.S., 2:1, E.W., 18:1. Magnification of each, 120. (2) Milne-Shaw Horizontal Seismographs. Photographic registration. Independent components, N.S., E.W. Mass of each, 1 lb. Period of each, 12 sec. Damping ratio of each, 20:1. Magnification of each, 250. (3) Wiechert Vertical Seismograph. Mechanical registration. Mass, 80 kgm. Period, 6 sec. Damping ratio, 20:1. Magnification, about 160. (4) A deformation Instrument. Photographic registration. Components, N.S., E.W. Mass of each, about 20 gm. Period of each, about 36 sec. Undamped. Used for determination of tilt. The time service at Ottawa is that of the Dominion Observatory and the registration on the record is kept correct to within 0.2 sec.

Toronto.—Lat., 43° 40' N.; Long., 79° 24' W.; Alt., 115.5 m. Substrata, sand and gravel on boulder clay to a depth of about 15 m. then shale over crystalline rock (Laurentian) to a depth of about 335.5 metres. Equipment:—(1) Milne Seismograph. Photographic registration. E.W. component. Mass, 0.23 kgm. Period, 18 sec. No damping. (2) Milne-Shaw Horizontal Seismographs. Photographic registration. Independent components, N.S., E.W. Mass of each, 1 lb. Period of each, 12 sec. Damping ratio of each, 20:1. Magnification of each, 150.

Time markings by Toronto Observatory clock. The registration has an error of 2 sec. The time is checked by meridian transits.

Saskatoon.—Lat., 52° 8' N.; Long., 106° 30' W.; Alt., 515 m. Substrata, clay and sand. Equipment: Small Mainka Pendulum Seismograph. Mechanical registration. Components, N.S., E.W. Mass of each, 139.3 kgm. Period of each, approximately 9 sec. Damping ratio of each, 5:1. Magnification of each, about 60.

Time by local clock, checked occasionally by telephone with train time.

Victoria.—Lat., 48° 24' 50" N.; Long., 123° 19' 28" W.; Alt., 67.6 m. Substrata, igneous rock. Equipment:—(1) Milne Seismograph. Photographic registration. E.W. comp. Mass, 0.23 kgm. Period, 18 sec. No damping. (2) Milne-Shaw Horizontal Seismographs. Photographic registration. Independent components, N.S., E.W. Mass of each, 1 lb. Period of each, 12 sec. Damping ratio of each, 20:1. Magnification of each, 250. (3) Wiechert Vertical Seismograph. Mechanical registration. Mass, 80 kgm. Period, 5 sec. Magnification, 70.

Time service of the meteorological station. Registration correct to ± 0.1 sec.

IV.—THE FLORA OF CANADA.

Under the above heading, the Canada Year Book, 1922-23, contained an article on "The Flora of Canada," prepared by the late J. M. Macoun, C.M.G., F.S.S., and M. O. Malte, Ph.D., and revised by the latter. See page 25 of the 1922-23 edition or page 73 of the 1921 edition.

V.—FAUNAS OF CANADA.

The Canada Year Book, 1922-23, contained an article under the above heading by P. A. Taverner of the Department of Mines, Ottawa. See page 32 of the 1922-23 edition or page 82 of the 1921 edition.

VI.—THE NATURAL RESOURCES OF CANADA.

The economic life of new countries must at first depend entirely, and later, mainly upon their natural resources. Older countries, after exhausting their most easily obtained resources, turn for a livelihood to manufacturing and similar pursuits, conserving their own resources and utilizing those of less developed areas. Canada is distinctly a new country, the resources of which are but now commencing to be appreciated; in recent years numerous surveys and investigations as to their extent and value have been made. A short summary of important details regarding them follows. Fuller information will be found in the introductions to the later sections—Agriculture, Furs, Fisheries, Forestry, Minerals, Water Powers—of this volume.

Agricultural Lands.—Of the total land area of the nine provinces (1,401,316,413 acres) it is estimated that approximately 358,162,190 acres are available for use in agricultural production. This figure is of course an estimate and is taken to include lands now occupied by agriculturists, including grazing lands, and all lands possible of devotion to similar purposes. The area at present under cultivation is but a fraction of this total, the extent under field crops in 1923 being 57,230,534 acres, while the total area under pasture in the same year was 9,567,143 acres. Statistics of farm lands at the census of 1921 place the area then occupied at 140,887,903 acres, figures by provinces of areas occupied and those still available being as follows:—Prince Edward Island, 1,216,483 acres occupied and 41,707 acres available; Nova Scotia, 4,723,550 and 3,368,450; New Brunswick, 4,269,560 and 6,448,140; Quebec, 17,257,012 and 26,487,988; Ontario, 22,628,901 and 33,821,099; Manitoba, 14,715,844 and 9,984,156; Saskatchewan, 44,022,907 and 49,135,093;

Alberta, 29,293,053 and 67,829,947; British Columbia, 2,860,593 and 19,757,407. Thus in all the provinces but Prince Edward Island, large areas are still available for settlement, and while the nature of the soil and of the climate may in some cases restrict the variety of crops, in general the grain, root and fodder crops can be profitably grown in all the provinces, while stock raising is carried on successfully both in the more densely settled areas and on their frontiers.

The Maritime provinces are noted for their fruit and vegetable crops, perhaps particularly for the oat and potato crops of Prince Edward Island and New Brunswick and the apples of the Annapolis valley in Nova Scotia. Quebec and Ontario are preeminently mixed farming communities, various districts specializing in dairying, tobacco, sheep, etc., while the Niagara peninsula in Ontario has long been famous for its fruit crops of both large and small varieties. In Manitoba, Saskatchewan and Alberta the production of grains is still of primary importance but is giving way to more diversified types of agriculture, while the stock raising industry, once so typical of the prairies, is regaining much of its former importance. In British Columbia, the fertile valleys are devoted principally to apple and other fruit crops, and numerous districts along the coast and on Vancouver island are given over to general farming and market gardening.

Of the larger areas of land still available for settlement, the clay belt of northern Ontario and Quebec, in which splendid crops are grown, is to a large extent undeveloped, and even larger areas in northern Saskatchewan and Alberta await cultivation.

Furs.—Canada is one of the world's greatest fur producers. As early as 1676 Canadian furs sold in England were valued at £19,500. Since that time great areas of northern territory have been explored by hunter and trapper. The larger companies engaged in the business, notably the Hudsons Bay Co. and Revillon Frères, maintain extensive systems of trading posts where trappers call at intervals to dispose of their pelts and procure supplies. The large uninhabited areas of northern Quebec, Ontario, Manitoba and the Northwest Territories furnish subsistence for many of the most highly prized fur-bearing animals, among the most important of which are the beaver, fisher, various varieties of foxes, marten and others. The animals are usually caught in traps during the winter months when the country is more accessible than during the summer, and the pelts are in the best condition. The successful breeding of the fox on fur farms came with the period of rising prices after 1890, and has since developed into an important industry. Prince Edward Island has always been the centre of the industry but farms are now found in all provinces of the Dominion. On Dec. 31, 1923, 1,179 fox farms were in operation, with a total of 40,125 foxes, principally of the "silver" variety.

Although the fox has proved the most suited to domestication, other kinds of fur-bearing wild animals are being raised in captivity—mink, raccoon, skunk, marten, fisher, beaver and muskrat. Karakul sheep, from which are obtained the furs known as "Persian lamb," "astrachan" and "broadtail," are also being raised successfully in Canada. In 1923 the number of farms engaged in the raising of fur-bearing animals other than foxes, was 61. Raccoon farms are the most numerous of the miscellaneous class, mink farms coming next. A few of the fox farms also raise miscellaneous fur-bearing animals in addition to the foxes.

During the year 1922-23 the value of pelts purchased by traders from trappers in Canada amounted to \$16,761,567. Pelts sold from fur farms in the calendar year 1923 were valued at \$860,468 and animals sold at \$1,014,683.

Forests.—Among the most notable of all Canadian natural resources are those of the forests. From the days when early French settlers established ship-building yards along the St. Lawrence up to the present, when our forests supply millions of tons of pulp, paper, and other wood products yearly, these resources have been of immense value, not only to Canada but to the Empire. Canada's forest areas may be stated as follows:—(1) the great coniferous forest of the Rocky mountains and Pacific coast, (2) the northern forest, stretching in a wide curve from the Yukon north of the Great Lakes to Labrador, and (3) the forest extending from lake Huron through southern Ontario and Quebec to New Brunswick and the Atlantic coast. Estimates have placed the extent of timber lands in the Dominion at 1,196,000 square miles, of which 478,400 are covered with saw timber of commercial size. With regard to quantity of timber, it has also been estimated that the stand of timber of merchantable size in 1923 comprised 482,075,500,000 feet board measure of saw timber and 1,279,705 cords of pulpwood, the stands in Ontario, Quebec, New Brunswick and Nova Scotia making up over 40 p.c. of the total. These figures place Canada next to the United States among the countries of the world with respect to forests, and while, during the past, the yearly cuts have generally exceeded new growth and considerable losses have been caused by fire and other destructive agencies, the extent of the uncut forests and the measures taken to preserve them and induce the development of new growth by reforestation assure an adequate supply for many years to come.

The strength and durability of many of the woods of British Columbia, notably the Douglas fir and the cedar, place them among the most valuable in commercial use, while pulp wood and some of the hardwoods from limits in eastern Canada are of equally high grade. Statistics of primary forest production in 1922 place its total value at \$170,850,096, of which \$58,336,848 and \$50,735,361 represent sawlogs and pulpwood respectively, or its equivalent value in standing timber at 2,377,845,182 cubic feet. The value of pulp and paper products alone in the same year was \$155,785,388.

Fisheries.—The first of Canada's resources to be exploited by Europeans was the fishing banks of the Atlantic coast. It is believed that for many years before the actual discovery and settlement of North America the cod-banks south of Newfoundland and east of Nova Scotia had attracted French fishermen by their abundant catches. These fishing grounds alone extend along a coast line of more than 5,000 miles, comprising an area of not less than 200,000 square miles, and are in the course of the cold Arctic current, a fact which tends greatly to improve the quality of the fish. The more important fishes of the out-shore fisheries are the cod, halibut, haddock, herring and mackerel, while the inshore and inland fisheries number the lobster, oyster, salmon, gaspereau, smelt, trout and maskinonge among their catches. Other fishing grounds include the inshore expanses of the St. Lawrence river, the Great Lakes, where whitefish and herring form perhaps the most valued catches, and innumerable other inland water areas abounding with trout, pike, bass and other game fish, Hudson Bay, with a shore line of 6,000 miles, and the Pacific coast. The fisheries of British Columbia, with its coast line of 7,000 miles, have in recent years shown a rapid development and the products of the estuarian salmon fisheries of the Fraser, Skeena and other rivers now make up two-fifths of the fish products of the Dominion, while in addition large catches of halibut, herring and whales are made off the western coast. The total value of the fisheries in the calendar year 1923 was \$42,565,545.

Minerals.—The numerous and varied mineral deposits of the Dominion form another of her most important resources. Their value was first appreciated early in the 17th century, when iron was mined in Cape Breton. Following a development which has only become an important one during recent years, when the needs of manufacturing industries and a more settled civilization were to be met, Canada has now become one of the important mining countries of the world. Her coal resources are only now being exploited to any considerable extent, the estimated total reserves available amounting to 1,234,269,310,000 metric tons, approximately one-sixth of the world's reserve; over 85 p.c. of the Canadian reserves are in Alberta. The total estimated reserves constitute almost one quarter of the total amount of coal available in North and South America. Extensive oil fields exist in the western provinces, where they remain practically undeveloped. Some smaller fields in Ontario have been exploited, while oil shale occurs in several parts of eastern Canada. In the production of natural gas, Canada holds second place among the countries of the world. Nickel deposits at Sudbury, Ontario, are as large as all others in the world combined, and produce six-sevenths of the world total. Copper deposits in the same area and in Manitoba, while not of great extent, still assure the maintenance and possible increase of the present rate of production. Arsenic in large quantities is a by-product obtained in the smelting of Ontario silver ores of the Cobalt and Porcupine districts, where the latter are found in large quantities. Gold, of which Canada was in 1922 the world's third largest producer, is also found in the same region, in British Columbia, in the Yukon, and in Quebec, where a large field is now being extensively prospected. Canada is the second largest producer of magnesite and the third largest producer of mica in the world. Large iron deposits, although of a low grade, are found in the district north of lake Superior. The asbestos deposits of southern Quebec are unrivalled in the production of this mineral. The total value of mineral production in Canada during 1923 was \$214,312,857.

Water Powers.—Canada's water area of 125,756 square miles, distributed as it is throughout all parts of the country, provides a large amount of potential electric energy. It is estimated that 18,255,316 h.p. are available at a minimum yearly flow, 32,075,998 at maximum flow, and that a turbine installation of 41,700,000 h.p. is available. The present turbine installation of 3,227,414 h.p. thus represents only 8 p.c. of the recorded water power resources. Perhaps the greatest use to which these resources have yet been put has been in the pulp and paper industry, and to a lesser degree in the mining, the electro-chemical, the electro-metallurgical and the flour milling industries. The water power utilized in the pulp and paper industry alone amounted on Feb. 1, 1924, to 726,375 h.p. Over 90 p.c. of the power available is in Quebec, Ontario, Manitoba and British Columbia; Quebec, with 7,000,000 h.p. available at ordinary minimum flow, has the largest resources in the Dominion.

VII.—CLIMATE AND METEOROLOGY.

1.—The Factors which Control Canadian Weather.¹

Several prime factors play important roles in establishing climatic types, latitude, distance from the sea (especially on the western side of the continents), altitude, and prevailing winds, the last named being a variable, accounting for differences in the character of corresponding seasons in different years.

¹Contributed by Sir Frederick Stupart, Director of the Meteorological Service, Toronto, Canada.

Canada, with her huge area, has a wide range of climatic types, varying between temperate and arctic, and between marine and semi-arid. No country, however, has a climate altogether independent of the rest of the world; the atmosphere knows no political boundaries, but moves in accordance with physical laws.

Prevailing Winds due to Inequality of Atmospheric Pressure.—Meteorological research has shown that the earth's atmosphere is not spread uniformly over its surface, and that certain regions exist where the atmospheric pressure is either higher or lower than the general average the year round, and other regions where it changes with the seasons. The winds are the outcome of the tendency to establish an equilibrium, which, however, is never attained. This general circulation of the atmosphere is withal a mechanism of marvellous beauty and intricacy, which, owing to causes yet imperfectly understood, is subject to many variations.

The most persistent and relatively unvarying feature of atmospheric distribution is a belt of high pressure between latitudes 30° and 40° in the southern hemisphere. Its partial counterpart exists in the northern hemisphere, but is there subject to greater changes which, without doubt, result from the larger land areas in the north. Between these two belts of high pressure is a belt of relatively low pressure over the equatorial regions. To this distribution, with certain other factors, is due the system of trade winds, the northeast and southeast trades. Towards higher latitudes beyond 40° in both hemispheres, there is a tendency towards a gradual diminution of pressure, and westerly winds prevail in the middle and even higher latitudes.

Unequal Heating of Land and Water.—The physical properties of land and water, as regards temperature, play an important role. The earth receives almost all its heat from the sun, and the character of the surface on which it falls plays a very important role in determining climatic differences. Water has a large capacity for heat and, being a fluid, is mixed by the winds and kept fairly uniform in temperature to considerable depths. Thus the sun's heat warms the oceans very slowly, and for the same reason the oceans cool very slowly. On the other hand, the same solar heat warms a mass of land more rapidly than the same mass of water in the ocean, and moreover the sun's heat is all absorbed in the surface layers of the land, which thus become very hot; similarly, when the sun is withdrawn, the land surface cools very rapidly. The result of these physical facts is that the northern portions of the continents of the northern hemisphere become very cold in winter, while the oceans in corresponding latitudes remain warm, and as cooling of the lower strata of the atmosphere, resting over the lands, leads to contraction, the pressure becomes higher over the continents than over the seas, and consequently, the tendency is for air to move from land to sea during the winter, while in summer, when all the continents become warmer than the oceans, the reverse holds. But the winter effect of contracting atmospheric lower strata is in operation more or less throughout the year over the ice covered arctic seas, and over Greenland, with the result that in summer the barometric pressure is a little higher in the polar regions than in the middle latitudes.

Cyclones and Anticyclones.—This general average distribution of pressure has an important bearing on Canadian weather. Another important factor to be considered is the influence of anticyclonic and cyclonic areas. We have mentioned the west to east drift of the air over the middle latitudes, and it is within and more frequently towards the northern limit of this drift, that the phenomena of the travelling anticyclone and cyclone are found. The anticyclonic area is a disturbance in the general drift of the atmosphere, usually of enormous extent, within which

the air is moving spirally outwards from the higher to the lower pressure. Within this region the weather is generally fine and settled. The cyclonic area is also a disturbance, varying from a few hundred to more than fifteen hundred miles in diameter. It may be elliptical or circular or very irregular in form, and within its boundaries the air is moving inwards from a higher to a lower pressure. This is the region of unsettled and stormy weather.

The anticyclones and cyclones, designated as areas of high and low pressure, or more shortly as highs and lows, pass across the North American continent in constant procession from west to east at velocities averaging 20 miles in summer and 30 miles in winter. The highs, especially those first appearing in the more northern regions, have a tendency towards a southeastward course, while the majority of the lows have a more directly eastward movement, the mean average track being from British Columbia to the Great Lakes and thence to Newfoundland. It is the passage of these high and low areas which brings to us the changing winds and weather, warm showery weather being associated with the lows, and fair, cool or cold weather, according to the season, with the highs. As example: the barometer is high, in say, Ottawa and Toronto, and begins to fall as a low approaches lake Michigan, the wind sets in from the east or southeast, cloudiness increases and within twelve hours conditions are more or less favourable for rain. Rain falls continuously when warm, moist, expanding and hence cooling air is passing slantingly upward over a barrier of relatively cold air, and these conditions are frequently found in advance of the low, more especially in the colder seasons, and occasionally in summer. But in summer it is more often that the rain partakes rather of the character of showers, perhaps with thunder, and this occurs when, with the heating of the land, upward moving, convectional, and hence rapidly cooling currents, become prevalent. It is often thought that if only water vapour in the cloud would fall as rain, it would be sufficient for all purposes, but this is not so; the actual amount of water in the cloud is not much greater than is often obtained in a heavy dew. Before an abundance of rain can be obtained, it is necessary to feed the cloud with a copious supply of water vapour. This supply is obtained when the centre or trough of lowest pressure approaches the place of observation, and the rain usually becomes heavier, and as it passes, the wind shifts to the northwest, not infrequently with a squall, and the barometer begins to rise in advance of an oncoming area of high pressure, accompanied by clearing weather. Such is an ordinary sequence of events over the larger portion of Canada.

Effect of Topography on Climate.—The topography of a country, however, exercises an important influence on weather conditions, and there are many parts of Ontario, to say nothing for the moment of British Columbia, where, owing to topographical features, considerable rain or snow may fall with westerly winds, when the barometer is rising behind a retreating low area. Immediately to the east of lake Huron and Georgian bay the land rises rather abruptly over 1,000 feet; westerly winds off the lake are deflected upwards by the increasing height of the land, and the air, expanding as it rises, is cooled below the dew point, with resulting precipitation. Hence it is that the snowfall in Grey, Bruce and neighbouring counties is greater than in the counties to the south and east, where the land falls away in elevation. This topographical effect is more general and more pronounced in British Columbia, where, in winter, the mean temperature of the sea is warmer than the land. The air coming eastward from the Pacific rises up the western slopes of the mountain ranges, and the cooling effect of expansion leads to very heavy rains on the outer coastline, with lighter but still heavy rains on the lower mainland.

Climatic Features of the Canadian Provinces.—There are very interesting climatic features peculiar to each of the Canadian provinces. Beginning in the far west, the most striking feature is the mildness of the climate near the Pacific coast, where the controlling influence is the prevailing westerly winds which bring the warm moist air from the Pacific. In addition to this, when winds are northerly and easterly, the air is being drawn from higher to lower levels, and is thus gradually warmed as the atmospheric pressure increases towards sea level. It is also due to this latter cause that the cold spells near the coast are never severe. Another feature is the seasonal character of the rainfalls. During the colder months of the year it is heavy while in summer it is very light. In the cold months, Pacific air, on reaching the continent, is cooled both by passing over a relatively cold land, and also a land with rapidly increasing elevation. In summer, on the contrary, the sea air is colder than the land, and it is only occasionally, even at high levels, that it is cooled below the dew point, hence the deficiency of rain during June, July and August. Another factor which plays an important role in British Columbia is the anticyclone moving southward from the Yukon. It is at such times that the severe east and northeast snowstorms occur in the mountains.

A problem which is receiving much attention is that of the precipitation of the western provinces. It has not yet been definitely decided whence comes the moisture which falls in summer rains, but from recent investigation it would appear that the greater part is from the gulf of Mexico, though a certain proportion comes across the mountains south of Canada from the Pacific. The variation from season to season is certainly closely connected with the distribution of atmospheric pressure over other parts of the continent. It is surmised that a cold spring, following a cold winter with an abnormal accumulation of snow and ice in northeastern Canada, including Hudson bay, is usually there followed by a rather persistent abnormally high barometer, which in turn leads to a prevalence of east and northeast winds over the northern portion of the Great Lakes, and thence westward to the Canadian prairies, while over the northwestern portions of the continent, the pressure is relatively low. The stream lines of the warm lower atmosphere in the Mississippi valley will then be from the southeast, converging towards colder east and northeast winds, and gradually rising above them. With such conditions, copious rains are likely to occur in the western Canadian provinces. When, in other seasons, a series of lows pass eastward across the Great Lakes, the resultant stream lines in western Canada will be southwest and west and the rainfall west of the Great Lakes will be light.

A factor which plays an important role in determining the character of western winters is the intensity of the anticyclones and the latitude in which they first appear. The weather chart of the northern hemisphere between longitude 40° E. and 180° W., now prepared daily, includes data both from Alaska and from the sub-arctic portions of the north Atlantic, and there is a growing conviction that the pressure distribution in northwestern America in winter depends largely on the position and the intensity of the normal area of low pressure over the north Pacific, which is the resultant of the persistent development of deep cyclonic areas.

In some seasons these cyclonic areas enter the continent very far north, and appear actually to prevent the formation of the anticyclones, which are so intimately associated with great cold waves, and in such seasons, comparatively mild or even very mild winters prevail in the western provinces, the general flow of air being from the south and west. In other seasons, the Pacific cyclonic areas develop farther south, and enter the continent over British Columbia, and then great

anti-cyclones, accompanied by intense cold, develop in the Mackenzie River valley and Yukon, and sweep southeastward towards the Great Lakes and eastern Canada. One of the problems then to be solved has relation to the factors governing cyclonic development in the higher latitudes over the ocean, and one wonders whether a varying solar radiation may not cause changes in the barometric distribution in the tropics, which will affect the strength of the trade winds and which will in turn lead to variations in the great ocean currents, and then, according as the warm waters are abnormally far north or far south, the Pacific centre of action will also vary. The solution of such a problem may ultimately lead to the possibility of forecasting the character of coming winters.

Canadian territory stretches northward beyond the arctic circle, from lands in the western provinces where cereal crops are an assured success to the barren lands where only mosses and lichen grow. A question of moment then, is how far north the lands of agricultural possibilities extend. Certainly, between the two limits, there is a wide zone, in the southern portion of which crops will in most years mature, and in the northern portion of which they will only very occasionally ripen. Throughout all this vast doubtful area, the factor of long summer sunlight plays an important role, and lengthens the period of growth, but another factor, acting adversely, is the liability of early and late summer frosts, and the husbandman who sees his crops rapidly maturing is not unlikely to see them destroyed in August before ready for harvest. Graphs showing summer temperature curves at various stations show how in August the downward trend of the curve is very rapid at the more northern stations.

The southern portions of Ontario enjoy a particularly favourable climate, partly owing to their being farther south than other portions of the Dominion. The most southerly point in Ontario is in the same latitude as Rome and Toronto is in the same latitude as Florence. The Great Lakes also exert an important influence in tempering the cold of winter and moderating the heat of summer, and undoubtedly have some influence in equalizing the precipitation, periods of drought there being less frequent than in corresponding latitudes to the west.

The enormous territory included in northern Ontario and Quebec, north of a line passing through Quebec city, enjoys a fairly warm summer, and it is only as autumn advances that a marked difference of temperature is registered between these districts and those farther south. It is not latitude alone which leads to the shorter growing season and more severe winters in these northern parts, but rather the fact that the mean path of cyclonic depression lies in the valley of the St. Lawrence to the south.

In the southern portions of Ontario and Quebec the winds connected with cyclonic circulation commonly veer from east through south to west, while in the north they back through northeast to northwest and it is only occasionally that the warmer air of the south is wafted northward. This, of course, leads to a steadier and more intense cold in winter, and, as this whole northern region has a fairly heavy precipitation, the snow lies deep in winter and does not disappear until quite late in the spring. It is practically certain that deforestation will not appreciably affect this northern climate, the causes which lead to existing conditions being the result of a world wide atmospheric circulation.

The weather types peculiar to the Maritime provinces are likewise largely controlled by factors apart from latitude (which is lower than that of Great Britain). Nova Scotia and New Brunswick lie near the eastern coast line of America, and hence are affected at intervals by the cold waves coming from the interior of the

continent. Then again the mean path of lows is directly over the northern part of the gulf of St. Lawrence, hence conditions associated with cyclonic areas are of frequent occurrence. These conditions are accentuated by the fact that many storms, especially in winter, develop near the Atlantic coast between the Gulf Stream and the cold land, and, moving northeastward, cause gales and bring precipitation in the Maritime provinces and Newfoundland.

2.—The Climate of Canada Since Confederation.¹

It has been proved by geologists that in geological time the climate of the world has undergone great changes, and many historians and archaeologists have in recent years carried on investigations as to whether in historical times there has been any appreciable change in the climates of the countries for which exist either written records or evidences provided by the remains of man's handiwork.

Some, for instance, are of the opinion that there are evidences of increasing desiccation in Asia and southern Europe, while in the western hemisphere, in Central America and adjacent territories, the disappearance of a by-gone civilization has been explained as resulting from a change of climate which has rendered uninhabitable a land obviously once well suited to man's best desires.

It has, however, been found that there are many conflicting data, and as the question stands to-day the general consensus of opinion is that while there have been pulsations of both long and short periods during which departures from averages have been quite pronounced, both as regards temperature and precipitation, yet there have not been appreciable progressive changes in either direction.

In view of these facts, we may be fairly sure that in the seasons in Canada of the more than fifty years since Confederation there have been variations such as have occurred down through the centuries and will occur in the future, but we need not expect to find any marked climatic change. There is, however, one factor which may have to some extent affected the climate of eastern Canada. That is deforestation, and yet, be it said in a somewhat guarded manner, the records that we possess do not indicate that this factor is as important as it was once thought to be.

Temperature.—On an inspection of the charts showing the curves of winter temperature for the different parts of Canada during the past 50 years, the most obvious fact is that the variations from average are largest in the western provinces and that they diminish gradually eastward toward the Atlantic coast. At Edmonton the mean temperature of the winter of 1887 was -4° , while that of 1889 was 22° ; the lowest winter monthly average, -14° , occurred in January, 1886, and the highest winter monthly, 22° , occurred in both January and February, 1889. Winnipeg shows even a greater range, with a mean winter temperature of -9° in 1887, and a mean of 19° in 1878. The lowest monthly mean was -16° in January, 1883, and the highest 23° in February, 1878.

At Toronto, the coldest winters were those of 1875 and 1904, with a mean of 17° , followed closely by 1885 and 1918 with a mean of 18° . The warmest winter was 1890 with a mean of 31° and the next warmest 1919 with a mean of 30° and 1921 with a mean of 29° , which give a difference of 14° between the warmest and the coldest winters. The coldest monthly mean recorded was 10.2° in February, 1875, the warmest January mean was 33° in 1880 and the warmest February was 30° in 1882.

¹By Sir Frederick Stupart, Director, Meteorological Service, Toronto, Canada.

At Montreal the coldest winter means were 10° in 1875, 1904 and 1905 and the warmest 21° in 1878 and 1892; the coldest January was 4° in 1888 and also in 1893, and the warmest 22° in both 1880 and 1913. The coldest February was 6° in 1885 and the warmest 27° in 1877.

In Nova Scotia, as represented by Halifax, the coldest winters were those of 1868 and 1905, with mean temperatures of 18° , and the warmest were those of 1870 and 1889, each with a mean temperature of 28° . The coldest January was that of 1920 with a temperature of 14° , and the coldest February was that of 1923, with a mean of 14° .

The lowest temperatures on record at various stations in Canada are as follows:—Fort Good Hope, Mackenzie river, -79° ; Fort Vermilion -78° ; Edmonton -57° ; Prince Albert -70° ; Winnipeg -53° ; White River, Ontario, -60° ; Toronto -26° ; Ottawa -32° ; Montreal -28° ; Quebec -34° ; Halifax -21° .

The record of 52 years at Winnipeg presents some very interesting facts. In the first 25 years there were but seven winters with a mean temperature higher than the mean of the whole period, while in the last 27 years there were but five winters with a mean below that of the whole period. This seems to indicate that the winter climate of the West is becoming milder, but it is a significant fact that the much longer record at St. Paul, Minn., indicates that the thirties and forties of the last century were comparatively mild in the West, hence there is suspicion of a long period weather cycle.

In Ontario, as represented by Toronto, the temperature curve of 53 years shows somewhat the same characteristics as that of Winnipeg, with more winters below average in the first half than in the second. In the Toronto record going back to 1831, there is, however, confirmation of the fact, indicated at St. Paul, that a long period beginning in the fifties and ending about 1888, during which the majority of the winters were abnormally cold, had been preceded by a period of about 20 years during which, while some few winters were very cold, most were comparatively mild. The decade 1841-1850 had, on the average, the mildest winters in the whole period 1831-1924.

It is obvious, therefore, that it would be unwise to form any definite conclusions regarding climatic changes on a record of even fifty years, as there are manifest evidences of pulsations of a longer period.

Since the Toronto record is much the longest, it is the most instructive we possess, and the following are some of the most noticeable features regarding the winters in Ontario. In the 1840-1850 period there were eight winters above normal temperature. The next twenty years contained more winters below than above but no very wide extremes. Then followed from 1873 to 1883 a period during which the winters alternated between cold and mild, while the six consecutive winters 1883-88 were all cold. The next four winters were mild and then from 1894 to 1903 there were ten successive winters of almost average temperature. The winters of 1904 and 1905 were very cold and then followed eleven years above average, with but two exceptions. The winters 1918-21 alternated very cold and very mild; that of 1920 being one of the coldest on record, and 1921 one of the mildest; 1922 was mild; 1923 was a little below average, and 1924 nearly average.

The general form of the temperature curves of Montreal and Halifax are very similar to those of western stations, but they do not give evidence of quite as marked a tendency towards a preponderance of milder winters in the last quarter century. At Montreal the mean temperature of the last decade was 1° below the mean of the whole period, while the mean of the first decade was 1° above. At Halifax the mean of the last decade was a fraction of a degree higher than that of the first decade.

MAP OF CANADA SHOWING NORMAL MEAN TEMPERATURE AND PRECIPITATION IN JANUARY.



While, as we have seen, the winters vary very considerably in severity, yet, as the spring advances, departures from a normal value diminish, and the summer season throughout the Dominion is subject to relatively small variations. There are differences, however, and in Alberta the summers of the eighties, exclusive of 1881, 1886 and 1889, were distinctly cooler than any term of years since then, while the summers of 1894, 1896, 1898 and 1906 especially were marked by higher temperature. In nearly all other years the mean of the season differed very little from the normal derived from the whole period.

The general character of the summers as regards temperature has been much the same in Manitoba as in the provinces farther west. In the seventies they were warm, while in the eighties they were cool, especially in 1883 and 1885. The nineties were also cool, except '90, '93 and '94, but since 1900 warm summers have predominated, with marked exceptions, however, in 1904 and 1905 and again in 1915.

From Ontario eastward the year 1869 had the coolest summer in 52 years, and after that the coolest summers occurred from 1882 to 1891, exclusive of 1887, and in 1902-3-4. A decade of warm summers commenced in 1892 and then since 1905 warm summers have predominated, but 1912-15 and '17 were comparatively cool. The spell of greatest heat ever recorded in Ontario occurred in the first week of July, 1911, when temperatures above 100° were registered on several consecutive days in the peninsula of Ontario. The summer of 1921 was the warmest on record and July was the warmest month.

There is some evidence of a tendency towards a somewhat higher mean temperature in both summer and autumn months in Ontario, a tendency which is more doubtful in the other provinces. In the early days of settlement in Ontario summer frosts were not uncommon but have since become quite rare. It would appear reasonable to suppose that deforestation of the country east of the Mississippi must lead to greater insolation in the northern United States and this would affect Ontario more than the other provinces.

The dates and severity of late spring and early autumn frosts in the western provinces are not quite conclusive, but the general inference from the longer records combined with those of short period is that there has been no appreciable change since the early days of settlement.

Precipitation.—Fifty-two years of meteorological records afford no ground for belief that the precipitation of the Dominion has changed with the gradual deforestation and the general activities of man in covering the country with a network of railways and wires carrying electrical currents. Variations of a character which suggest cycles, probably due to cosmical causes, are, however, quite apparent, but at the same time perplexing, and it may be assumed with a high degree of probability that there has been no permanent progressive change in either rainfall or snow.

The Winnipeg records and also records from a shorter term of years in the West indicate that the eighties included more dry summers than in any subsequent corresponding period, while the Alberta records show a remarkable period of about six wet summers from 1899 to 1904, and again from 1911 to 1915.

While 1878 was the year of greatest precipitation in Ontario, and also the summer of greatest rainfall, the seventies as a whole had dry summers. In the eighties the summers of '80 and '83 and '85 were wet and others about normal, excepting '87 which was very dry. In the nineties the summers of '95, '96, '98 and '99 were particularly dry, while the other years had an ample but not excessive rainfall. Since 1900 the summers of 1907, 1911 and 1913 were exceptionally dry, while others were nearly normal. At Montreal the year immediately succeeding Confederation

and 1915 were the years of least precipitation, and 1869, 1885 and 1900 were the years of greatest precipitation. The decade commencing 1870 was that of least precipitation and that commencing 1900 of greatest. Here again we have no indication of progressive change.

The records of precipitation made at Halifax since 1868 show no evidence of progressive change during the fifty-seven years which have elapsed. During the first decade the average annual precipitation was 54 inches, during the second 58 inches, the third 57, the fourth 58, the fifth 54 inches. The wettest years were 1884, 1888, 1896, 1907, 1908, 1910, with total precipitation respectively as follows: 64, 67, 70, 64, 65, 68 inches. The driest years were 1868, 1879, 1889, 1894, 1905, 1914, 1916, 1921, the respective totals being 50, 48, 47, 45, 48, 46, 44 inches. In the first decade the greatest annual snowfall was 125 inches and the least 29 inches. In the second decade these figures became respectively 134 inches and 32 inches; in the third 108 and 50½ inches, in the fourth 108 and 55 and in the fifth 101 and 38. In January, 1894, 56 inches of snow fell and in October, 1896, 15 inches of rain were recorded on a total of 20 days.

In the seventies and early eighties there were many more years with heavy snowfalls in March in Ontario and Quebec than have occurred in any period of equal length since then. The result was to make the annual average snowfall for that period considerably higher than the normal, although the annual total precipitation in years with a snowy March was frequently below normal. Lack of observations for this period in the western provinces, except at Winnipeg, leaves us restricted to a consideration of the years since 1883. The most remarkable feature of the western snowfalls was the change from light to heavy snowfalls which occurred in the nineties. If we consider the decades 1885-1894, 1895-1904, 1905-1914, and form the average annual totals of snowfall for these, we find at Medicine Hat, 29 inches in the first decade, 45 inches in the second, 24 inches in the third. At Edmonton the figures are respectively, 36, 52, 39 inches; at Calgary 37, 51 and 42; at Qu'Appelle, 45, 70 and 51. At Winnipeg, however, the sequence is different, the respective decadal averages running 52, 43½, 50½. At Prince Albert the first of these decades is missing, but the second two have averages of 58½ and 48½, which sufficiently resemble the other records, as do also the figures for these two decades at Battleford, viz., 35 and 24.

3.—The Meteorological Service of Canada.

Under the above heading Sir Frederick Stupart contributed a short article descriptive of the growth and present activities of the Meteorological Service, which for reasons of space is not reprinted here, to the 1922-23 edition of the Year Book (pp. 43-47); to it the interested reader is referred.

4.—Meteorological Tables.

Tables 6 and 7 which follow, have been prepared by the Meteorological Service of Canada for insertion in the Year Book. For the interpretation of Table 6 a note on the method used in measuring temperature and precipitation is appended.

TEMPERATURE AND PRECIPITATION.

TEMPERATURE.—At the stations of the Dominion Meteorological Service the highest and lowest temperature in each 24 hours, termed respectively the maximum and the minimum, are recorded by self-registering thermometers. For any month the sum of the daily maxima, divided by the number of days of the month, is the mean maximum temperature of that month. The mean minimum temperature is obtained in a similar manner. The half sum of the mean maximum and the mean minimum is called the mean temperature.

MAP OF CANADA SHOWING NORMAL MEAN TEMPERATURE AND PRECIPITATION IN JULY.



The averages of these results for any particular month over a period of years are the average means for that period and are used as normal means or temperatures of reference. The highest and lowest temperatures recorded during the whole period of years are termed the extreme maximum and extreme minimum respectively. These latter figures are of course to be regarded as extraordinary, the more unlikely to recur the longer the period from which they have been derived. Temperatures below zero have the minus sign (—) prefixed. The mean winter temperature is based on the records of January, February, March, November and December, and the mean summer temperature is based on those of June, July and August.

PRECIPITATION.—Under the collective term "precipitation" is included all moisture which has been precipitated from the atmosphere upon the earth: rain, snow, hail, sleet, etc. The amount of moisture is conveniently measured by determining the depth to which it has accumulated upon an impervious surface, and is always expressed in inches of depth. The total depth of snow is tabulated separately, but is added to the depth of rain after division by ten. An extended series of experiments in melting and measuring snow having been collated, the rule was deduced that a given fall of snow will, in melting, diminish on the average to one-tenth of its original depth. This rule is used in practice. All solid forms of precipitation other than snow are included in the tables of rain.

6.—Normal Temperature and Precipitation at Selected Canadian Stations.

VICTORIA, B.C.—Lat. 48° 25' N., long. 123° 21' W. (Observations for 30 years.)

Months.	Temperature °F.						Precipitation in inches.				
	Mean daily.	Mean daily max.	Mean daily min.	High est.	Low est.	Mean daily range.	Averages.			Extremes.	
							Rain.	Snow.	Total.	Greatest.	Least.
Jan.....	39.2	43.5	35.0	56.0	—2.0	8.5	3.88	6.3	4.51	6.54	2.56
Feb.....	40.3	45.0	35.6	60.0	6.0	9.4	3.08	4.5	3.53	6.20	0.96
Mar.....	43.1	49.2	37.0	68.0	17.0	12.2	2.40	1.5	2.55	4.58	0.67
April.....	47.7	54.9	40.6	75.0	24.0	14.3	1.73	S	1.73	5.40	0.21
May.....	53.0	60.7	45.3	83.0	31.0	15.4	1.30	—	1.30	2.83	0.35
June.....	57.1	65.1	49.0	88.0	36.0	16.1	0.93	—	0.93	2.37	0.08
July.....	60.3	69.2	51.2	90.0	37.0	18.0	0.36	—	0.36	1.15	R
Aug.....	60.0	68.8	51.2	88.0	37.0	17.6	0.65	—	0.65	2.26	0.00
Sept.....	55.6	63.3	47.9	85.0	30.0	15.4	2.01	—	2.01	4.27	0.32
Oct.....	50.4	56.0	44.8	70.0	28.0	11.2	2.55	—	2.55	5.60	0.46
Nov.....	44.5	48.6	40.5	63.0	17.0	8.1	6.31	1.5	6.46	11.50	0.91
Dec.....	41.5	45.1	37.8	59.0	8.0	7.3	5.86	0.5	5.91	12.41	1.66
Year.....	49.4	55.8	43.0	90.0	—2.0	12.8	31.06	14.3	32.49	51.03	22.58

VANCOUVER, B.C.—Lat. 49° 17' N., long. 123° 5' W. (Observations for 30 years.)

Jan.....	35.0	39.2	30.9	55.0	2.0	8.3	7.12	14.4	8.56	10.54	6.08
Feb.....	37.8	43.1	32.5	58.0	10.0	10.6	5.90	3.2	6.22	10.17	2.60
Mar.....	41.9	49.0	34.8	61.0	15.0	14.2	4.31	1.5	4.46	10.29	0.89
April.....	47.0	55.8	38.3	79.0	27.0	17.5	3.09	—	3.09	5.29	1.04
May.....	53.5	62.3	44.7	80.0	33.0	17.6	3.56	—	3.56	5.39	1.44
June.....	58.4	67.7	49.1	88.0	36.0	18.6	2.82	—	2.82	5.42	1.43
July.....	63.2	73.3	53.0	90.0	43.0	20.3	1.33	—	1.33	2.45	0.32
Aug.....	61.5	71.0	52.0	92.0	39.0	19.0	1.71	—	1.71	5.86	0.22
Sept.....	55.7	64.0	47.4	82.0	30.0	16.6	4.29	—	4.29	9.09	1.61
Oct.....	49.2	55.7	42.6	69.0	23.0	13.1	5.69	—	5.69	9.20	1.76
Nov.....	42.4	47.1	37.6	63.0	15.0	9.5	10.97	3.1	11.28	18.99	4.18
Dec.....	38.9	42.8	35.0	58.0	17.0	7.8	7.27	2.9	7.56	9.55	4.21
Year.....	48.7	56.0	41.5	92.0	2.0	14.5	58.06	25.1	60.57	72.29	52.27

PORT SIMPSON, B.C.—Lat. 54° 34' N., long. 130° 25' W. (Observations for 20 years.)

Jan.....	34.0	40.0	28.1	64.0	—9.0	11.9	8.62	9.8	9.60	16.74	1.08
Feb.....	34.8	41.8	27.7	63.0	—10.0	14.1	6.07	11.8	7.25	16.65	1.93
Mar.....	37.6	44.8	30.3	63.0	11.0	14.5	5.06	5.3	5.59	8.16	1.41
April.....	41.6	49.9	33.4	73.0	18.0	16.5	4.85	3.0	5.15	14.31	2.24
May.....	48.3	56.5	40.0	79.0	27.0	16.5	5.14	—	5.14	9.84	1.63
June.....	52.8	60.5	45.1	88.0	34.0	15.4	4.26	—	4.26	7.50	1.20
July.....	56.0	63.3	48.8	88.0	29.0	14.5	4.42	—	4.42	9.41	1.28
Aug.....	56.7	63.8	49.5	80.0	31.0	14.3	6.93	—	6.93	14.11	1.74
Sept.....	52.2	59.1	45.2	74.0	30.0	13.9	9.03	—	9.03	14.63	2.20
Oct.....	47.1	53.5	40.7	65.0	28.0	12.8	12.21	—	12.21	16.99	6.71
Nov.....	39.7	45.6	33.7	65.0	6.0	11.9	11.47	1.6	11.63	23.90	3.26
Dec.....	36.9	42.6	31.2	62.0	5.0	11.4	10.11	8.7	10.98	18.82	5.23
Year.....	44.8	51.8	37.8	88.0	—10.0	14.0	88.17	40.2	92.19	126.48	62.05

6.—Normal Temperature and Precipitation at Selected Canadian Stations— continued.

KAMLOOPS, B.C.—Lat. 50° 41' N., long. 120° 18' W. (Observations for 22 years.)

Months.	Temperature °F.						Precipitation in inches.				
	Mean daily.	Mean daily max.	Mean daily min.	High-est.	Low-est.	Mean daily range.	Averages.			Extremes.	
							Rain.	Snow.	Total.	Greatest.	Least.
Jan.....	22.4	28.3	16.5	54.0	-31.0	11.8	0.13	7.7	0.90	0.60	0.35
Feb.....	26.5	33.4	19.6	64.0	-27.0	13.8	0.20	6.0	0.80	1.17	0.02
Mar.....	37.6	47.3	27.8	70.0	- 6.0	19.5	0.20	1.2	0.32	0.83	0.01
April.....	49.7	61.1	38.3	92.0	19.0	22.8	0.36	S	0.36	1.36	R
May.....	57.5	70.3	44.8	100.0	26.0	25.5	0.93	-	0.93	2.50	R
June.....	64.6	76.4	52.7	101.0	35.0	23.7	1.23	-	1.23	3.07	0.57
July.....	69.6	82.7	56.5	102.0	42.0	26.2	1.27	-	1.27	3.50	0.35
Aug.....	68.1	80.9	55.4	101.0	35.0	25.5	1.05	-	1.05	3.73	0.00
Sept.....	58.4	69.3	47.4	93.0	28.0	21.9	0.94	-	0.94	2.34	0.10
Oct.....	47.8	56.2	39.3	82.0	16.0	16.9	0.57	0.2	0.59	1.41	R
Nov.....	35.8	41.5	30.2	72.0	-22.0	11.3	0.40	6.5	1.05	1.23	0.07
Dec.....	28.8	32.6	24.9	59.0	-17.0	7.7	0.20	13.5	1.55	0.64	0.12
Year.....	47.2	56.7	37.8	102.0	-31.0	18.9	7.48	35.1	10.99	13.47	7.07

DAWSON, YUKON.—Lat. 64° 5' N., long. 139° 20' W. (Observations for 30 years.)

Jan.....	-24.6	-18.0	-31.3	30.0	-68.0	13.3	0.00	8.6	0.86	1.73	R
Feb.....	-12.0	- 4.3	-19.6	45.0	-55.0	15.3	R	7.3	0.73	1.35	0.20
Mar.....	5.6	16.5	- 5.3	52.0	-47.0	21.8	0.01	4.7	0.48	1.21	0.00
April.....	27.6	40.2	15.1	67.0	-30.0	25.1	0.18	4.7	0.65	1.68	0.23
May.....	46.8	59.0	34.6	85.0	12.0	24.4	0.83	0.4	0.87	2.00	0.25
June.....	56.9	70.3	43.6	90.0	27.0	26.7	1.18	0.3	1.21	2.66	0.25
July.....	59.4	71.9	46.8	95.0	31.0	25.1	1.61	-	1.61	3.32	0.62
Aug.....	54.0	66.2	41.7	85.0	23.0	24.5	1.51	-	1.51	2.38	0.07
Sept.....	41.6	51.1	32.2	78.0	8.0	18.9	1.40	1.8	1.58	3.52	0.86
Oct.....	26.4	32.7	20.1	68.0	-22.0	12.6	0.29	8.8	1.17	4.09	0.10
Nov.....	0.4	6.4	- 5.6	46.0	-48.0	12.0	0.01	12.4	1.25	2.60	0.24
Dec.....	-10.2	- 4.3	-16.1	38.0	-63.0	11.8	R	10.9	1.09	2.09	0.08
Year.....	22.6	33.0	13.0	95.0	-68.0	20.0	7.02	59.9	13.01	17.75	6.28

EDMONTON, ALTA.—Lat. 53° 35' N., long. 113° 30' W. (Observations for 30 years.)

Jan.....	5.9	15.6	- 3.8	57.0	-57.0	19.4	0.06	7.0	0.76	2.49	0.05
Feb.....	10.6	21.1	0.1	62.0	-57.0	21.0	0.00	6.7	0.67	2.33	S
Mar.....	23.4	34.9	11.9	72.0	-40.0	23.0	0.05	6.2	0.67	1.93	R
April.....	40.8	52.9	28.6	84.0	-15.0	24.3	0.44	3.6	0.80	2.60	0.04
May.....	51.2	64.4	38.1	90.0	10.0	26.3	1.73	1.3	1.86	4.04	0.20
June.....	57.3	70.1	44.4	94.0	25.0	25.7	3.26	S	3.26	8.53	0.00
July.....	61.2	73.7	48.8	94.0	33.0	24.9	3.56	-	3.56	11.13	0.15
Aug.....	59.0	71.6	46.4	90.0	26.0	25.2	2.47	-	2.47	6.43	0.49
Sept.....	50.4	62.9	37.8	87.0	12.0	25.1	1.33	0.7	1.40	4.32	0.00
Oct.....	41.7	53.2	30.3	82.0	-10.0	22.9	0.39	3.5	0.74	1.86	0.00
Nov.....	24.5	33.3	15.6	74.0	-37.0	17.7	0.06	6.7	0.73	3.57	0.00
Dec.....	16.0	24.7	7.3	60.0	-43.0	17.4	0.07	6.8	0.75	3.21	0.00
Year.....	36.9	48.2	25.6	94.0	-57.0	22.6	13.42	42.5	17.67	27.81	8.16

MEDICINE HAT, ALTA.—Lat. 50° 2' N., long. 110° 41' W. (Observations for 30 years.)

Jan.....	11.2	21.6	0.7	62.0	-51.0	20.9	0.00	6.1	0.61	1.72	0.00
Feb.....	12.8	23.5	2.1	64.0	-46.0	21.4	0.01	6.0	0.61	1.51	0.00
Mar.....	26.7	38.4	14.9	84.0	-38.0	23.5	0.11	5.0	0.61	1.62	S
April.....	45.1	58.8	31.4	96.0	-16.0	27.4	0.37	2.4	0.61	2.26	0.03
May.....	54.7	68.0	41.5	99.0	12.0	26.5	1.70	0.5	1.75	6.29	0.12
June.....	62.5	75.6	49.3	107.0	30.0	28.3	2.57	S	2.57	5.62	0.00
July.....	68.4	82.7	54.1	108.0	36.0	28.6	1.73	-	1.73	4.86	0.09
Aug.....	66.0	80.7	51.4	104.0	31.0	29.3	1.51	-	1.51	5.65	0.00
Sept.....	56.5	70.2	42.7	94.0	17.0	27.5	0.88	0.4	0.92	2.41	0.00
Oct.....	45.8	58.7	32.9	93.0	-10.0	25.8	0.51	1.1	0.62	3.48	0.00
Nov.....	29.3	39.9	18.7	76.0	-36.0	21.2	0.08	6.4	0.72	3.11	R
Dec.....	21.1	31.0	11.2	68.0	-37.0	19.8	0.06	4.7	0.53	1.42	0.00
Year.....	41.7	54.1	29.2	108.0	-51.0	22.2	11.53	32.6	12.79	22.28	6.72

6.—Normal Temperature and Precipitation at Selected Canadian Stations—continued.

FORT VERMILION, ALTA.—Lat. 53° 21' N., long. 110° 52' W. (Observations for 18 years.)

Months.	Temperature °F.						Precipitation in inches.				
	Mean daily.	Mean daily max.	Mean daily min.	High-est.	Low-est.	Mean daily range.	Averages.			Extremes.	
							Rain.	Snow.	Total.	Greatest.	Least.
Jan.	-14.8	-2.5	-27.1	50.0	-77.0	24.6	0.00	4.7	0.47	1.80	0.15
Feb.	-3.9	9.7	-17.5	53.0	-58.0	27.2	0.00	3.7	0.37	0.65	0.20
Mar.	11.8	26.0	-2.4	63.0	-41.0	28.4	0.01	7.0	0.71	1.70	0.00
April.	32.0	44.5	19.5	78.0	-29.0	25.0	0.23	6.1	0.84	1.85	0.00
May.	49.3	63.3	35.3	93.0	13.0	28.0	0.78	0.6	0.84	2.06	0.00
June.	57.9	72.2	43.7	98.0	26.0	28.5	1.65	0.1	1.66	3.44	0.25
July.	61.0	75.2	46.9	94.0	28.0	28.3	1.60	—	1.60	3.49	0.51
Aug.	57.1	70.4	43.8	101.0	28.0	26.6	1.57	—	1.57	3.32	0.53
Sept.	47.3	58.2	36.4	84.0	9.0	21.8	1.40	0.1	1.41	2.33	0.64
Oct.	33.1	43.1	23.1	70.0	-14.0	20.0	0.26	2.1	0.47	0.81	0.00
Nov.	14.0	22.4	5.6	48.0	-26.0	16.8	0.02	7.2	0.74	1.40	0.20
Dec.	-1.7	10.2	-13.6	65.0	-50.0	23.8	0.00	5.0	0.50	1.60	0.20
Year.	28.6	41.1	16.1	101.0	-77.0	25.0	7.52	36.6	11.18	14.78	7.60

FORT CHIPEWYAN, ALTA.—Lat. 58° 46' N., long. 111° 13' W. (Observations for 16 years.)

Jan.	-11.9	-3.5	-20.4	45.0	-55.0	16.9	0.00	9.0	0.90	1.68	0.02
Feb.	-9.1	0.5	-18.7	46.0	-56.0	19.2	R	5.8	0.58	2.03	0.03
Mar.	5.0	15.1	-5.0	47.0	-41.0	20.1	R	5.8	0.58	1.58	0.09
April.	-28.5	39.4	17.6	69.0	-22.0	21.8	0.20	4.4	0.64	3.04	0.06
May.	44.5	53.8	35.1	83.0	-3.0	18.7	0.65	1.6	0.81	2.08	0.02
June.	54.0	64.6	43.3	90.0	24.0	21.3	1.56	0.1	1.57	3.31	0.10
July.	61.5	71.0	51.9	93.0	26.0	19.1	2.64	—	2.64	9.52	0.21
Aug.	58.1	68.1	48.2	89.0	25.0	19.9	1.64	—	1.64	3.67	0.39
Sept.	45.2	53.0	37.3	79.0	13.0	15.7	1.52	0.5	1.57	2.93	0.27
Oct.	33.7	40.1	27.3	66.0	-9.0	12.8	0.32	4.3	0.75	5.30	0.02
Nov.	11.0	17.9	4.2	56.0	-33.0	13.7	0.05	8.6	0.91	2.28	0.26
Dec.	2.2	10.3	-5.9	49.0	-48.0	16.2	0.01	9.1	0.92	3.20	0.09
Year.	26.9	35.8	17.9	90.0	-56.0	17.9	8.59	49.2	13.51	16.99	6.70

QU'APPELLE, SASK.—Lat. 50° 32' N., long. 103° 57' W. (Observations for 30 years.)

Jan.	-0.6	8.5	-9.7	50.0	-47.0	18.2	0.00	6.9	0.69	2.28	0.05
Feb.	-2.0	11.2	-7.2	50.0	-55.0	18.4	0.00	8.1	0.81	2.85	0.12
Mar.	16.0	25.7	-6.2	76.0	-45.0	19.5	0.06	9.6	1.02	4.11	0.05
April.	37.3	49.1	25.5	89.0	-24.0	23.6	0.43	6.7	1.10	3.59	0.29
May.	49.8	62.4	37.3	92.0	8.0	25.1	2.40	3.1	2.71	6.95	0.25
June.	59.6	70.8	48.4	101.0	25.0	22.4	3.69	S	3.69	7.19	0.32
July.	63.8	75.9	51.7	100.0	34.0	24.2	2.84	—	2.84	7.25	0.38
Aug.	61.1	73.3	48.9	100.0	27.0	24.4	2.04	—	2.04	5.03	0.30
Sept.	52.0	64.0	39.9	93.0	12.0	24.1	1.28	1.0	1.38	4.61	0.08
Oct.	40.8	51.5	30.2	86.0	-12.0	21.3	0.53	4.5	0.98	3.35	S
Nov.	21.8	30.4	13.3	73.0	-30.0	17.1	0.14	8.4	0.98	2.51	0.12
Dec.	10.7	18.5	2.8	49.0	-40.0	15.7	0.01	7.1	0.72	3.11	0.03
Year.	34.5	45.1	23.9	101.0	-55.0	21.2	13.42	55.4	18.96	26.47	10.14

PRINCE ALBERT, SASK.—Lat. 53° 12' N., long. 105° 48' W. (Observations for 30 years.)

Jan.	-5.9	5.3	-17.1	53.0	-67.0	22.4	0.00	8.2	0.82	2.00	0.22
Feb.	-1.3	11.3	-13.9	52.0	-70.0	25.2	0.01	6.8	0.69	2.15	0.04
Mar.	1.2	26.2	-2.1	68.0	-44.0	28.3	0.10	7.7	0.87	2.56	0.17
April.	36.1	48.7	23.6	86.0	-23.0	25.1	0.38	4.4	0.82	3.37	0.03
May.	48.9	62.6	35.2	90.0	2.0	27.4	1.34	1.6	1.50	4.87	0.01
June.	58.1	71.0	45.1	96.0	17.0	25.9	2.67	—	2.67	7.36	1.00
July.	62.0	74.2	49.8	93.0	33.0	24.4	2.31	—	2.31	5.31	0.17
Aug.	58.8	71.7	46.0	94.0	22.0	25.7	2.31	—	2.31	8.01	R
Sept.	49.4	61.7	37.1	87.0	14.0	24.6	1.32	0.7	1.39	2.94	0.09
Oct.	38.3	49.2	27.4	85.0	-5.0	21.8	0.57	2.3	0.80	1.97	0.10
Nov.	18.5	27.4	9.5	66.0	-41.0	17.9	0.12	8.7	0.99	3.06	0.07
Dec.	5.3	15.1	-4.5	58.0	-57.0	19.6	0.01	8.0	0.81	2.61	0.19
Year.	31.7	43.7	19.7	96.0	-70.0	24.0	11.13	48.4	15.97	29.88	9.25

6.—Normal Temperature and Precipitation at Selected Canadian Stations— continued.

WINNIPEG, MAN.—Lat. 49° 55' N., long. 97° 6' W. (Observations for 30 years.)

Months.	Temperature °F.						Precipitation in inches.				
	Mean daily.	Mean daily max.	Mean daily min.	High-est.	Low-est.	Mean daily range.	Averages.			Extremes.	
							Rain.	Snow.	Total.	Greatest.	Least.
Jan.....	- 3.5	6.8	-13.8	42.0	-46.0	20.6	0.01	8.1	0.82	2.12	0.12
Feb.....	- 0.5	10.7	-11.8	46.0	-46.0	22.5	0.01	7.4	0.75	1.80	0.09
Mar.....	15.2	26.7	3.6	73.0	-37.0	23.1	0.21	9.6	1.17	3.00	0.29
April.....	38.7	50.1	27.4	90.0	-13.0	22.7	1.10	4.4	1.54	5.64	0.25
May.....	51.5	64.5	38.5	94.0	11.0	26.0	2.06	0.9	2.15	6.38	0.11
June.....	62.6	74.9	50.2	101.0	21.0	24.7	3.03	-	3.03	6.30	0.45
July.....	66.2	78.1	54.3	96.0	35.0	23.8	3.25	-	3.25	7.14	0.87
Aug.....	62.7	75.0	50.4	103.0	30.0	24.6	2.18	-	2.18	4.75	0.77
Sept.....	54.1	65.9	42.2	99.0	17.0	23.7	2.07	0.1	2.08	5.49	0.60
Oct.....	41.6	52.0	31.3	85.0	- 3.0	20.7	1.22	1.4	1.36	5.67	0.29
Nov.....	22.0	30.8	13.3	71.0	-33.0	17.5	0.17	8.2	0.99	2.34	0.06
Dec.....	7.2	16.7	- 2.4	49.0	-44.0	19.1	0.06	8.6	0.92	3.99	0.11
Year.....	34.8	46.0	23.6	103.0	-46.0	22.4	15.37	48.7	20.24	28.40	14.38

PORT ARTHUR, ONT.—Lat. 48° 27' N., long. 89° 13' W. (Observations for 30 years.)

Jan.....	6.2	17.1	- 4.6	48.0	-40.0	21.7	0.02	7.4	0.76	1.46	0.21
Feb.....	8.2	19.7	- 3.3	52.0	-51.0	23.0	0.05	6.5	0.70	2.77	0.04
Mar.....	19.6	30.8	8.4	70.0	-42.0	22.4	0.11	8.1	0.92	2.76	0.18
April.....	35.6	44.7	26.4	78.0	- 3.0	18.3	1.19	3.6	1.55	3.09	0.07
May.....	46.0	55.6	36.5	89.0	16.0	19.1	1.98	0.5	2.03	4.10	0.36
June.....	57.1	67.2	47.0	91.0	20.0	20.2	2.69	-	2.69	6.94	0.50
July.....	62.6	73.5	51.7	96.0	33.0	21.8	3.76	-	3.76	9.21	1.39
Aug.....	59.0	70.6	47.5	94.0	31.0	23.1	2.77	-	2.77	5.06	1.02
Sept.....	52.8	62.3	43.3	88.0	19.0	19.0	3.26	-	3.26	7.54	1.30
Oct.....	41.5	50.6	32.9	80.0	1.0	17.7	2.39	0.9	2.48	5.27	0.37
Nov.....	26.7	34.6	18.7	69.0	-22.0	15.9	0.84	6.2	1.46	4.29	0.35
Dec.....	13.4	22.7	4.1	51.0	-38.0	18.6	0.18	6.6	0.84	2.68	0.02
Year.....	35.7	45.8	25.7	96.0	-51.0	20.1	19.24	39.8	23.22	29.43	18.80

TORONTO, ONT.—Lat. 43° 39' N., long. 79° 20' W. (Observations for 70 years.)

Jan.....	22.1	29.1	15.2	58.0	-26.0	13.9	1.14	17.3	2.87	5.72	0.61
Feb.....	21.7	29.2	14.1	54.0	-25.0	15.1	0.93	16.5	2.58	5.21	0.29
Mar.....	29.0	36.3	21.9	75.0	-16.0	14.4	1.50	11.5	2.65	6.70	0.66
April.....	41.4	49.6	33.3	90.0	6.0	16.3	2.15	2.5	2.40	4.90	0.09
May.....	52.7	62.0	43.3	93.0	25.0	18.7	2.97	0.1	2.98	9.36	0.52
June.....	62.6	72.4	52.9	97.0	28.0	19.5	2.76	-	2.76	8.09	0.57
July.....	68.1	77.9	58.2	103.0	39.0	19.7	3.04	-	3.04	5.63	0.36
Aug.....	66.6	76.1	57.1	102.0	40.0	19.0	2.77	-	2.77	7.09	R.
Sept.....	59.2	68.2	50.2	97.0	28.0	18.0	3.18	-	3.18	9.76	0.40
Oct.....	47.0	54.9	39.1	86.0	16.0	15.8	2.40	0.6	2.46	5.96	0.56
Nov.....	36.3	42.5	30.1	70.0	- 5.0	12.4	2.49	4.6	2.95	5.84	0.11
Dec.....	26.3	32.5	20.0	61.0	-21.0	12.5	1.53	13.0	2.83	6.00	0.47
Year.....	44.4	52.6	36.3	103.0	-26.0	16.3	26.86	66.0	33.46	50.18	24.84

PARRY SOUND, ONT.—Lat. 45° 20' N., long. 80° 1' W. (Observations for 40 years.)

Jan.....	14.3	24.5	4.0	54.0	-38.0	20.5	0.87	31.5	4.02	7.75	1.76
Feb.....	13.7	24.9	2.6	58.0	-38.0	22.3	0.76	23.4	3.10	6.31	0.46
Mar.....	23.5	34.3	12.8	71.0	-27.0	21.5	1.33	14.8	2.81	5.49	0.75
April.....	39.0	49.4	28.5	82.0	- 3.0	20.9	1.76	3.1	2.07	4.03	0.75
May.....	51.5	62.4	40.6	90.0	16.0	21.8	2.96	0.6	3.02	6.06	0.58
June.....	61.8	72.7	50.9	94.0	31.0	21.8	2.47	-	2.47	5.47	0.70
July.....	66.5	76.9	56.1	98.0	37.0	20.8	2.80	-	2.80	0.92	1.10
Aug.....	64.2	74.5	54.0	93.0	35.0	20.5	2.83	-	2.83	5.46	0.63
Sept.....	55.7	67.6	47.9	90.0	24.0	19.7	4.49	S.	4.49	8.43	1.52
Oct.....	45.8	54.5	37.1	84.0	9.0	17.4	3.83	0.9	3.92	6.33	0.57
Nov.....	33.5	40.8	26.2	69.0	-20.0	14.6	2.63	14.9	4.12	7.33	2.09
Dec.....	20.5	29.7	11.4	56.0	-39.0	18.3	1.22	32.3	4.45	8.16	2.18
Year.....	41.0	51.0	31.0	98.0	-39.0	20.0	27.95	121.5	40.10	50.30	31.59

6.—Normal Temperature and Precipitation at Selected Canadian Stations— continued.

COTTAM, ONT.—Lat. 42° 09' N., long. 82° 44' W. (Observations for 20 years.)

Months.	Temperature °F.						Precipitation in inches.				
	Mean daily.	Mean daily max.	Mean daily min.	High-est.	Low-est.	Mean daily range.	Averages.			Extremes.	
							Rain.	Snow.	Total.	Greatest.	Least.
Jan.....	22.0	31.6	12.3	62.0	-20.0	19.3	1.59	11.8	2.77	6.01	1.45
Feb.....	21.1	30.9	11.3	57.0	-25.0	19.6	1.61	10.1	2.62	6.16	1.11
Mar.....	32.8	42.8	22.8	80.0	- 8.0	20.0	1.90	6.8	2.58	6.30	1.07
April.....	43.7	54.6	32.7	87.0	10.0	21.9	2.34	2.1	2.55	4.54	0.47
May.....	55.6	67.6	43.6	95.0	19.0	24.0	3.58	0.2	3.60	6.76	1.48
June.....	64.6	76.6	52.6	95.0	30.0	24.0	4.18	-	4.18	7.21	0.41
July.....	70.6	83.0	58.2	100.0	36.0	24.8	3.38	-	3.38	7.08	0.66
Aug.....	68.9	81.6	56.2	100.0	35.0	25.4	2.49	-	2.49	5.66	0.00
Sept.....	61.6	74.4	48.9	97.0	26.0	25.5	2.18	-	2.18	5.50	1.09
Oct.....	49.4	61.7	37.1	85.0	10.0	24.6	2.48	0.1	2.49	5.36	1.07
Nov.....	37.8	47.9	27.8	74.0	8.0	20.1	2.40	2.7	2.67	5.04	1.05
Dec.....	26.4	35.0	17.9	70.0	-11.0	17.1	1.82	8.2	2.64	4.42	0.90
Year.....	46.2	57.3	35.1	100.0	-25.0	22.2	29.95	42.0	34.15	38.97	26.67

HAILEYBURY, ONT.—Lat. 47° 26' N., long. 79° 38' W. (Observations for 20 years.)

Jan.....	6.4	17.4	- 4.6	48.0	-40.0	22.0	0.27	17.5	2.02	3.43	1.20
Feb.....	7.8	14.0	- 3.4	48.0	-48.0	17.4	0.20	18.0	2.00	3.54	0.54
Mar.....	19.4	21.6	8.2	66.0	-34.0	13.4	0.52	16.0	2.12	4.43	0.59
April.....	37.1	48.0	26.2	81.0	- 3.0	21.8	1.25	5.8	1.83	4.38	0.88
May.....	50.8	62.2	39.4	93.0	14.0	22.8	2.83	1.5	2.98	4.73	0.75
June.....	61.7	73.4	50.0	100.0	28.0	23.4	2.91	-	2.91	5.55	0.72
July.....	66.0	76.8	55.4	102.0	36.0	21.4	2.72	-	2.72	8.21	1.55
Aug.....	62.2	72.7	51.8	94.0	30.0	29.9	2.88	-	2.88	4.45	1.14
Sept.....	55.3	64.9	45.7	91.0	24.0	19.2	2.31	-	2.31	7.44	0.96
Oct.....	43.0	51.5	34.4	80.0	13.0	17.1	2.58	2.8	2.86	5.20	0.97
Nov.....	23.2	35.2	21.1	67.0	-15.0	14.1	0.99	13.7	2.36	4.35	0.43
Dec.....	13.6	22.0	5.2	51.0	-34.0	16.8	0.75	19.9	2.74	3.95	0.88
Year.....	37.1	46.7	27.5	102.0	-48.0	19.2	20.21	95.2	29.73	39.77	27.13

MONTREAL, QUE.—Lat. 45° 31' N., long. 73° 34' W. (Observations for 50 years.)

Jan.....	12.7	20.8	4.6	53.0	-26.0	16.2	0.85	31.4	3.99	6.18	2.08
Feb.....	14.3	21.8	6.8	47.0	-24.0	15.0	0.72	26.1	3.33	6.35	0.49
Mar.....	24.6	31.7	17.4	61.0	-15.0	14.3	1.45	19.5	3.40	7.32	1.01
April.....	41.3	49.3	33.4	77.0	8.0	15.9	1.69	5.3	2.22	4.19	0.48
May.....	52.9	61.6	44.3	89.0	23.0	17.3	3.01	0.1	3.02	6.22	0.11
June.....	63.9	73.6	54.3	92.0	38.0	19.3	3.21	-	3.21	8.00	0.90
July.....	69.1	77.4	60.8	95.0	47.0	16.6	3.95	-	3.95	7.72	0.96
Aug.....	66.1	74.0	58.2	90.0	43.0	15.8	3.35	-	3.35	7.89	1.23
Sept.....	58.5	66.2	50.8	90.0	33.0	15.4	3.46	-	3.46	6.65	0.88
Oct.....	46.0	52.9	39.1	80.0	21.0	13.8	3.13	1.4	3.27	7.47	0.65
Nov.....	33.3	39.2	27.4	68.0	0.0	11.8	2.26	11.7	3.43	6.40	1.44
Dec.....	19.6	26.5	12.7	59.0	-21.0	13.8	1.17	25.2	3.69	5.94	1.12
Year.....	41.8	49.6	34.1	95.0	-26.0	15.5	28.25	120.7	40.32	48.01	30.97

QUEBEC, QUE.—Lat. 46° 48' N., long. 71° 12' W. (Observations for 20 years.)

Jan.....	9.7	17.7	1.8	47.0	-34.0	15.9	0.64	30.7	3.71	6.58	1.10
Feb.....	12.0	20.2	3.7	49.0	-32.0	16.5	0.74	27.3	3.47	6.22	0.98
Mar.....	22.8	30.7	15.0	64.0	-23.0	15.5	1.29	19.9	3.28	6.16	1.05
April.....	37.0	45.3	28.7	80.0	3.0	16.6	1.42	6.4	2.06	6.57	0.70
May.....	52.0	62.0	42.0	88.0	21.0	20.0	3.01	0.4	3.05	6.93	0.27
June.....	61.2	70.8	51.5	90.0	34.0	19.3	3.83	-	3.83	9.23	1.32
July.....	66.1	75.7	56.6	96.0	39.0	19.1	4.30	-	4.30	7.12	0.53
Aug.....	62.8	71.5	54.1	90.0	38.0	17.4	4.00	-	4.00	9.58	1.35
Sept.....	55.3	63.6	46.9	88.0	29.0	16.7	3.77	-	3.77	8.75	1.08
Oct.....	42.0	47.8	36.3	77.0	14.0	11.5	2.94	1.5	3.09	6.99	0.93
Nov.....	32.2	35.7	28.7	66.0	-10.0	7.0	1.75	14.2	3.17	7.09	0.90
Dec.....	15.0	22.2	7.8	55.0	-27.0	14.4	0.85	25.2	3.37	6.78	1.13
Year.....	39.0	47.0	31.1	96.0	-34.0	15.9	28.54	125.6	41.10	52.39	32.12

6.—Normal Temperature and Precipitation at Selected Canadian Stations— concluded.

SOUTH WEST POINT, ANTICOSTI, QUE.—Lat. 49° 23' N., long. 63° 38' W. (Observations for 30 years.)

Months.	Temperature °F.						Precipitation in inches.				
	Mean daily.	Mean daily max.	Mean daily min.	High-est.	Low-est.	Mean daily range.	Averages.			Extremes.	
							Rain.	Snow.	Total.	Greatest.	Least.
Jan.	11.9	19.8	4.0	47.0	-40.0	15.8	0.58	18.3	2.41	6.70	0.54
Feb.	12.5	19.7	5.3	46.0	-35.0	14.4	0.25	14.7	1.72	4.70	0.27
Mar.	21.0	27.1	15.0	47.0	-20.0	12.1	0.50	12.0	1.70	4.95	0.29
April.	30.5	35.4	25.6	71.0	-3.0	9.8	1.12	5.6	1.68	7.92	R.05
May.	39.8	45.0	34.5	78.0	19.0	10.5	2.40	0.4	2.44	4.68	0.05
June.	48.4	53.4	43.5	85.0	26.0	9.9	2.93	0.1	2.94	5.58	0.40
July.	56.6	62.3	51.0	79.0	34.0	11.3	3.14	-	3.14	8.70	0.43
Aug.	56.2	61.5	51.0	80.0	28.0	10.5	3.43	-	3.43	4.92	0.76
Sept.	48.7	54.4	43.0	73.0	20.0	11.4	2.92	-	2.92	4.81	0.70
Oct.	39.8	45.1	34.5	68.0	8.0	10.6	3.40	0.5	3.45	9.85	0.54
Nov.	30.2	35.4	25.1	57.0	-1.0	10.3	2.05	6.4	2.69	4.54	0.49
Dec.	20.5	27.2	13.8	52.0	-39.0	13.4	0.65	14.7	2.12	5.10	0.32
Year.	34.7	40.5	28.9	85.0	-40.0	11.6	23.37	72.7	30.64	45.43	15.83

FREDERICTON, N.B.—Lat. 45° 56' N., long. 66° 40' W. (Observations for 30 years.)

Jan.	13.3	24.3	2.2	55.0	-34.0	22.1	1.64	23.9	4.03	8.34	1.36
Feb.	15.4	26.6	4.1	51.0	-35.0	22.5	0.96	47.0	5.66	4.78	0.48
Mar.	26.5	36.9	16.0	65.0	-20.0	20.9	2.16	25.6	4.72	7.58	1.32
April.	38.9	49.5	28.3	82.0	-2.0	21.2	1.97	10.0	2.97	4.43	0.30
May.	51.2	62.8	39.6	92.0	24.0	23.2	3.21	0.1	3.22	9.08	0.88
June.	59.6	71.7	47.5	92.0	26.0	24.2	3.71	-	3.71	8.01	1.47
July.	65.9	77.0	54.8	96.0	40.0	22.2	3.03	-	3.03	6.28	1.26
Aug.	63.2	73.7	52.7	95.0	35.0	21.0	3.97	-	3.97	6.99	0.76
Sept.	55.3	66.1	44.5	92.0	25.0	21.6	3.54	-	3.54	7.73	0.81
Oct.	43.4	54.2	32.6	81.0	15.0	21.6	4.02	0.5	4.07	9.99	0.85
Nov.	33.0	40.9	25.0	68.0	-3.0	15.9	3.17	9.0	4.07	6.47	0.96
Dec.	19.4	28.2	10.5	58.0	-26.0	17.7	1.56	18.9	3.45	6.42	1.18
Year.	40.4	51.0	29.8	96.0	-35.0	21.2	32.94	135.0	46.44	54.62	35.02

YARMOUTH, N.S.—Lat. 45° 53' N., long. 65° 45' W. (Observations for 35 years.)

Jan.	30.0	34.3	19.6	54.0	-6.0	14.7	2.75	20.3	4.78	0.92	1.97
Feb.	25.7	32.7	13.8	52.0	-12.0	13.9	2.13	21.8	4.31	7.77	2.48
Mar.	31.8	37.8	25.7	55.0	-2.0	12.1	3.32	13.3	4.65	10.75	1.25
April.	39.7	46.4	33.1	72.0	17.0	13.3	3.17	5.5	3.72	7.12	0.82
May.	48.1	55.6	40.6	73.0	25.0	15.0	3.77	S.	3.77	7.66	0.93
June.	55.3	63.0	47.6	79.0	31.0	15.4	2.83	-	2.83	6.68	0.69
July.	60.8	68.2	53.2	86.0	41.0	15.0	3.38	-	3.38	8.42	0.52
Aug.	60.7	67.9	53.6	83.0	39.0	14.3	3.51	-	3.51	9.69	1.08
Sept.	56.0	63.2	48.8	79.0	31.0	14.4	3.50	-	3.50	5.70	0.88
Oct.	48.6	55.4	41.7	74.0	25.0	13.7	4.15	0.3	4.18	11.38	0.78
Nov.	41.8	46.6	37.1	66.0	11.0	9.5	3.77	4.0	4.17	8.56	1.51
Dec.	31.1	37.6	24.5	58.0	-3.0	13.3	3.31	14.7	4.78	9.20	1.88
Year.	44.1	50.7	37.0	86.0	-12.0	13.7	39.59	79.9	47.58	70.90	35.06

CHARLOTTETOWN, P.E.I.—Lat. 46° 14' N., long., 63° 8' W. (Observations for 30 years.)

Jan.	19.0	27.0	11.0	52.0	-19.0	16.0	1.46	19.6	3.42	7.62	1.10
Feb.	18.0	26.0	9.0	49.0	-21.0	17.0	0.86	17.5	2.61	6.37	0.88
Mar.	27.0	34.0	20.0	54.0	-15.0	14.0	1.67	13.9	3.06	5.54	1.48
April.	37.0	44.0	30.0	74.0	8.0	14.0	2.11	8.8	2.99	6.10	0.82
May.	48.0	56.0	40.0	81.0	26.0	16.0	2.51	1.0	2.61	5.85	0.40
June.	57.0	66.0	49.0	87.0	32.0	17.0	2.54	-	2.54	5.37	0.47
July.	66.0	74.0	58.0	91.0	37.0	12.0	2.96	-	2.96	8.97	1.81
Aug.	65.0	73.0	57.0	92.0	42.0	16.0	3.37	-	3.37	8.44	0.94
Sept.	58.0	65.0	50.0	87.0	34.0	15.0	3.36	-	3.36	8.75	0.66
Oct.	48.0	54.0	41.0	77.0	26.0	13.0	4.46	0.2	4.48	10.38	0.50
Nov.	37.0	42.0	32.0	62.0	11.0	10.0	3.48	6.0	4.08	8.00	1.74
Dec.	25.0	32.0	19.0	52.0	-11.0	13.0	2.19	16.0	3.79	7.25	1.41
Year.	42.0	49.0	35.0	92.0	-21.0	14.0	30.97	83.0	39.27	56.43	32.45

7.—Averages of Sunshine, Wind and Weather at Selected Canadian Stations.

(The years indicate the period of observation on which averages are based.)

VICTORIA¹, B.C., lat. 48° 25' N., long. 123° 21' W.

Months.	Sunshine average.		Average no. days completely clouded.	Wind.					Average no. days with		
	No. of hours per month.	Per-centage of possible duration.		Average no. of gales.	Average hourly velocity.	Prevailing direction.	Strongest wind recorded.		Thunder.	Fog.	Hail.
							Miles per hour.	Direction.			
Jan.....	53.4	19.6	14	3	9.0	N	50	SE	—	1	—
Feb.....	79.4	27.9	7	2	8.9	N	48	SW	—	1	—
Mar.....	143.0	39.0	5	2	9.0	SE	52	SW	—	1	—
April.....	184.8	44.9	2	2	9.0	SW	50	SW	—	—	—
May.....	198.6	41.9	3	2	8.8	SW	41	W	—	1	—
June.....	215.1	44.7	1	2	9.7	SW	49	SW	—	—	—
July.....	293.7	60.4	1	2	9.1	SW	44	SW	—	—	—
Aug.....	256.9	58.0	1	1	7.8	SW	43	SW	—	2	—
Sept.....	183.3	48.6	3	1	6.5	SW	44	SW	—	3	—
Oct.....	118.3	35.3	7	1	6.8	E	56	SW	—	4	—
Nov.....	57.3	20.8	10	3	9.9	NE	57	SE	—	1	—
Dec.....	38.1	14.9	13	3	8.8	NE	59	SE	—	1	—
Year.....	1,821.9	—	67	24	8.6	SW	59	SE	—	15	—

¹Sunshine, 1895-1910; days clouded, 1901-1920; wind, days with thunder, etc., 1896-1915.VANCOUVER¹, B.C., lat. 49° 17' N., long. 123° 5' W.

Months.	No. of hours per month.	Per-centage of possible duration.	Average no. days completely clouded.	Average no. of gales.	Average hourly velocity.	Prevailing direction.	Strongest wind recorded.	Thunder.	Fog.	Hail.
							Miles per hour.	Direction.		
Jan.....	46.4	17.3	17	—	4.3	E	40	NW	—	3
Feb.....	51.5	18.2	10	—	4.0	E	26	W	—	4
Mar.....	135.6	36.9	7	—	5.0	E	30	SE	—	1
April.....	179.4	43.7	4	Average less than one per month.	4.8	SE	25	W	—	—
May.....	220.0	46.5	3	—	4.8	SE	23	W	1	—
June.....	228.0	47.2	2	—	4.5	E	27	W	1	—
July.....	265.6	54.6	2	—	4.1	S	22	W	2	—
Aug.....	252.7	57.0	2	—	3.7	S	20	W	1	—
Sept.....	162.9	43.3	5	—	4.6	S	26	NW	1	2
Oct.....	111.3	33.4	8	—	3.8	SE	35	W	—	6
Nov.....	51.1	18.6	13	—	4.3	E	25	NW	—	4
Dec.....	38.8	15.3	15	—	4.4	E	30	W	—	4
Year.....	1,743.3	—	88	—	4.4	SE	40	NW	6	24

¹Sunshine, 1908-1917; days clouded, 1909-1920; wind, days with thunder, etc., 1905-1920.KAMLOOPS¹, B.C., lat. 50° 41' N., long. 120° 18' W.

Months.	No. of hours per month.	Per-centage of possible duration.	Average no. days completely clouded.	Average no. of gales.	Average hourly velocity.	Prevailing direction.	Strongest wind recorded.	Thunder.	Fog.	Hail.
							Miles per hour.	Direction.		
Jan.....	65.0	24.7	12	—	3.5	S	25	SE	—	—
Feb.....	87.0	31.1	7	—	3.1	S	24	NE	—	—
Mar.....	166.0	45.2	4	—	4.5	SE	31	W	—	—
April.....	187.0	45.2	3	Average less than one per month.	4.8	S	30	W	—	—
May.....	224.0	46.8	3	—	4.4	S	30	W	—	—
June.....	240.0	50.1	3	—	4.1	SW	25	SE	—	—
July.....	295.0	59.9	1	—	4.1	SW	40	SE	1	—
Aug.....	262.0	58.6	2	—	3.5	SW	30	SE	—	—
Sept.....	185.0	49.1	3	—	3.5	S	40	S	—	—
Oct.....	140.0	42.3	6	—	3.6	SE	40	NW	—	—
Nov.....	70.0	26.2	10	—	4.4	SE	40	W	—	—
Dec.....	50.0	20.1	13	—	3.3	S	30	SE	—	—
Year.....	1,971.0	—	67	—	3.9	S	40	Several.	—	—

¹Sunshine, 1906-1916; days clouded, 1906-1920; wind, etc., 1897-1916.EDMONTON¹, ALTA., lat. 53° 35' N., long. 113° 30' W.

Months.	No. of hours per month.	Per-centage of possible duration.	Average no. days completely clouded.	Average no. of gales.	Average hourly velocity.	Prevailing direction.	Strongest wind recorded.	Thunder.	Fog.	Hail.
							Miles per hour.	Direction.		
Jan.....	79	31.6	10	—	4.4	W	36	W	—	—
Feb.....	125	45.7	3	—	4.9	W	34	NW	—	—
Mar.....	174	47.4	3	—	5.6	S	28	NW	—	—
April.....	212	50.7	3	—	7.2	SW	42	NW	—	—
May.....	222	45.1	3	1	6.8	SW	36	SE	1	1
June.....	242	47.8	3	—	5.9	W	34	NW	3	1
July.....	273	53.8	2	—	5.3	SW	30	NW	4	1
Aug.....	256	56.3	2	—	4.7	W	26	NW	2	1
Sept.....	184	48.6	3	—	5.3	W	36	W	1	1
Oct.....	150	46.2	4	—	5.2	W	28	NW	—	—
Nov.....	87	33.9	7	—	4.6	SW	25	NW	—	—
Dec.....	77	33.2	11	—	4.2	SW	34	NW	—	—
Year.....	2,081	—	54	1	5.3	SW	42	NW	11	5

¹Sunshine, 1906-1916; days clouded, 1906-1920; wind, etc., 1897-1916.

7.—Averages of Sunshine, Wind and Weather at Selected Canadian Stations— continued.

(The years indicate the period of observation on which averages are based.)

MEDICINE HAT¹, ALTA., lat. 50° 2' N., long. 110° 41' W.

Months.	Sunshine average.		Average no. days completely clouded.	Wind.				Average no. days with			
	No. of hours per month.	Per-centage of possible duration.		Average no. of gales.	Average hourly velocity.	Prevailing direction.	Strongest wind recorded.		Thun-der.	Fog.	Hail.
							Miles per hour.	Direc-tion.			
Jan.....	88	33.1	8	2	5.9	SW	46	S	-	1	-
Feb.....	117	41.6	6	2	6.0	SW	51	S	-	-	-
Mar.....	169	46.0	3	2	6.6	SW	41	S, NW	-	-	-
April.....	220	53.4	2	3	7.4	W	50	S	-	-	-
May.....	233	48.9	3	2	7.5	S	60	NW	2	-	-
June.....	268	55.0	1	2	7.5	SW	61	SW	4	-	-
July.....	326	66.6	1	1	6.4	SW	46	SW	4	-	-
Aug.....	284	63.8	1	1	5.6	SW	50	W	3	-	-
Sept.....	196	52.0	3	1	5.8	SW	50	S	1	-	-
Oct.....	158	47.7	4	1	5.9	W	60	W	-	-	-
Nov.....	102	37.8	6	2	6.1	SW	60	SW	-	-	-
Dec.....	82	32.9	9	2	6.5	SW	60	N	-	-	-
Year.....	2,243	-	47	21	6.4	SW	61	SW	14	1	-

¹Sunshine, 1906-1916; days clouded, 1910-1920; wind, days with thunder, etc., 1896-1915.

ROSTERN ¹ , SASK., lat. 52° 39' N., long. 106° 21' W.				PRINCE ALBERT ¹ , SASK., lat. 53° 12' N., long. 105° 48' W.							
Jan.....	91.6	36.1	10	-	3.3	S	26	NW	-	-	-
Feb.....	137.7	50.0	4	-	3.2	SW	29	NW	-	-	-
Mar.....	176.1	47.9	4	-	4.0	SW	35	NW	-	-	-
April.....	220.8	53.6	3	-	5.0	SE	36	NW	-	-	-
May.....	262.7	53.8	2	-	4.9	S	25	SE	-	-	-
June.....	280.1	56.0	2	-	4.2	SE	31	N	1	-	-
July.....	294.8	65.2	2	-	3.6	SW	31	SE	3	1	-
Aug.....	272.9	60.3	2	-	3.0	SW	24	E	2	1	-
Sept.....	190.8	50.4	4	-	3.8	SW	24	Several.	-	1	-
Oct.....	141.4	43.3	6	-	3.9	SW	28	NW	-	-	-
Nov.....	111.6	43.1	7	-	3.4	S	20	Several.	-	-	-
Dec.....	78.3	33.0	11	-	3.2	SW	32	N	-	-	-
Year.....	2,258.8	-	57	-	3.8	S	36	NW	6	3	-

¹Sunshine and days clouded, 1911-1920; wind 1896-1917, 1898 missing; days with thunder, etc., 1896-1917.

INDIAN HEAD ¹ , SASK., lat. 50° 31' N., long. 103° 40' W.				QU'APPELLE ¹ , SASK., lat. 50° 32' N., long. 103° 57' W.							
Jan.....	81.4	32.8	10	2	9.4	NW	66	NW	-	1	-
Feb.....	103.7	37.0	6	2	9.5	NW	46	W	-	1	-
Mar.....	131.8	35.9	6	2	9.6	W	48	NW	-	1	-
April.....	170.1	41.2	4	2	10.0	SW	58	S	-	1	-
May.....	214.4	44.6	5	2	9.8	SW	50	NW	2	1	-
June.....	207.4	42.4	4	1	9.0	S	48	SW	4	1	1
July.....	272.4	55.5	2	1	8.2	SW	42	NW	5	1	-
Aug.....	228.9	51.3	2	1	7.4	SW	38	SW, NW	4	1	-
Sept.....	162.8	43.2	5	1	8.4	W	41	SW	1	1	-
Oct.....	130.5	39.5	6	2	9.1	W	45	NW	-	1	-
Nov.....	68.8	25.7	8	1	9.1	W	42	NW	-	1	-
Dec.....	58.8	23.8	12	2	9.0	W	45	NW	-	1	-
Year.....	1,831.0	-	70	19	9.0	W	66	NW	16	12	1

¹Sunshine and days clouded, 1891-1910; wind, etc., 1897-1917 (1908 missing).WINNIPEG¹, MAN., lat. 49° 55' N., long. 97° 6' W.

Jan.....	110.3	41.4	9	7	12.8	W	50	N, W	-	-	-
Feb.....	138.6	49.2	6	5	12.2	SW	55	NW	-	1	-
Mar.....	175.0	47.7	7	6	13.1	S	66	NW	-	-	-
April.....	206.7	50.2	5	7	14.5	E	60	W	1	-	-
May.....	250.7	52.3	4	6	14.5	E	66	NW	2	-	-
June.....	250.4	51.6	3	5	12.7	E	46	NW	4	-	-
July.....	290.5	59.5	2	5	12.1	S	55	SW	5	-	-
Aug.....	256.7	57.8	3	4	11.3	S	43	W	3	-	-
Sept.....	179.6	47.7	4	6	13.0	S	55	W	2	-	-
Oct.....	124.8	37.6	8	6	13.8	S	60	NW	1	-	-
Nov.....	89.6	33.2	10	5	12.4	SW	45	NW, W	-	1	-
Dec.....	81.2	32.2	14	4	12.2	SW	59	W	-	-	-
Year.....	2,154.1	-	75	66	12.9	S	66	NW	18	2	-

¹Sunshine, 1882-1910; days clouded, 1901-1920; wind, etc., 1897-1916.

7.—Averages of Sunshine, Wind and Weather at Selected Canadian Stations— continued.

(The years indicate the period of observation on which averages are based.)

HAILEYBURY¹, ONT., lat. 47° 26' N., long. 79° 38' W.

Months.	Sunshine average.		Average no. days completely clouded.	Wind.					Average no. days with		
	No. of hours per month.	Per-centage of possible duration.		Average no. of gales.	Average hourly velocity.	Prevail- ing direc- tion.	Strongest wind recorded.		Thun- der.	Fog.	Hail.
							Miles per hour.	Direc- tion.			
Jan.....	92	33.4	10	1	2	NW	8	N, NW	-	1	-
Feb.....	119	41.6	7	2	2	NW	9	SW	-	1	-
Mar.....	165	44.8	5	2	2	S	9	SW	-	1	-
April.....	193	47.3	5	1	2	S	8	N, NW	-	1	-
May.....	210	45.0	4	1	2	S	8	NW	2	1	-
June.....	259	54.5	2	1	2	SE	8	SW	4	1	-
July.....	266	55.5	1	1	2	SW	8	Several.	6	-	-
Aug.....	221	50.3	2	1	2	S	8	NW	4	1	-
Sept.....	174	46.3	4	2	2	SW	8	S	2	1	-
Oct.....	110	32.8	7	2	2	SW	9	NW	1	1	-
Nov.....	56	20.1	13	2	2	NW	10	SW, W	-	1	-
Dec.....	61	23.2	12	1	2	W	8	NW	-	1	-
Year....	1,733	-	72	17	2	SW	10	SW, W	19	11	-

¹Sunshine, 1906-1916; days clouded, 1901-1920; wind, days with thunder, etc., 1896-1920.

GRAVENHURST ¹ , ONT., lat. 44° 56' N., long. 79° 23' W.				PARRY SOUND ¹ , ONT., lat. 45° 20' N., long. 80° 1' W.							
Jan.....	80.7	28.4	12	1	9.4	SE	48	W	—	—	—
Feb.....	126.3	43.4	8	1	9.0	S	49	W	—	—	—
Mar.....	153.0	41.5	7	1	9.1	SW	52	SW	1	—	—
April.....	189.4	46.9	5	1	8.9	S	36	N	1	1	—
May.....	217.2	47.4	5	1	7.9	S	39	SW	2	—	—
June.....	229.8	49.4	2	—	6.8	SW	36	SW	2	—	—
July.....	265.2	56.4	1	—	6.5	SW	36	NW	3	—	—
Aug.....	252.6	58.2	1	—	6.9	S	30	SW, SE	3	—	—
Sept.....	170.6	45.6	4	—	7.4	SW	36	SW	2	—	—
Oct.....	138.5	41.0	7	—	8.7	S	36	SW	2	—	—
Nov.....	85.4	29.9	11	2	10.5	SW	48	SW	—	—	—
Dec.....	61.5	21.5	14	1	9.4	S	37	W, NW	—	—	—
Year.....	1,970.2	—	77	8	8.4	S	52	SW	14	1	—

¹Sunshine, 1902-1910, 1915-1920; wind, etc., 1896-1920.

TORONTO ¹ , ONT., lat. 43° 39' N., long. 79° 20' W.											
Jan.....	77.9	27.0	11	6	13.6	SW	56	NE	—	2	—
Feb.....	108.1	36.7	6	5	13.7	W	56	E	—	1	—
Mar.....	150.0	40.5	6	5	12.8	SW	60	NW	1	1	—
April.....	190.7	47.1	4	3	11.9	SE	50	E	1	1	—
May.....	218.9	47.9	2	2	9.9	SE	54	W	3	1	—
June.....	259.8	56.3	1	1	8.7	SE	35	NE	4	1	—
July.....	282.2	60.4	1	1	8.0	S	36	W, SW	5	1	—
Aug.....	252.7	59.8	1	—	8.0	SW	48	NE	6	—	—
Sept.....	207.8	55.4	2	1	8.8	SE	50	S	3	2	—
Oct.....	149.3	43.8	4	2	9.9	S	53	W	1	2	—
Nov.....	85.3	29.4	8	4	12.2	SW	50	W	—	2	—
Dec.....	65.2	23.5	10	7	13.2	SW	50	SW	—	1	—
Year.....	2,046.9	—	56	37	10.9	S	60	NW	34	15	—

¹Sunshine, 1882-1910; days clouded, 1901-1920; wind, etc., 1896-1920.

WOODSTOCK ¹ , ONT., lat. 43° 38' N., long. 80° 46' W.											
Jan.....	62.0	21.4	14	4	12.4	SW	57	SW	—	1	—
Feb.....	88.7	30.2	8	4	12.3	W	47	NW	—	1	—
Mar.....	122.6	33.2	9	5	12.2	SW	52	SW	—	1	—
April.....	167.4	41.7	6	4	12.1	SW	48	SW	1	1	—
May.....	206.8	45.6	4	3	10.5	SW	46	SW	2	1	—
June.....	246.1	53.7	2	1	8.9	W	36	E	2	1	—
July.....	275.4	59.4	1	1	8.4	W	36	SW	2	1	—
Aug.....	238.0	55.4	2	1	8.0	SW	40	SW	2	2	—
Sept.....	181.8	48.7	4	1	8.4	W	34	NW	2	1	—
Oct.....	135.7	41.7	6	2	10.5	SW	40	NW	1	2	—
Nov.....	76.4	26.3	10	3	11.9	SW	53	SW	—	2	—
Dec.....	54.1	19.4	15	4	12.4	SW	49	SW	—	1	—
Year.....	1,855.0	—	81	33	10.7	SW	57	SW	12	15	—

¹Sunshine, 1882-1911; days clouded, 1901-1920; wind, days with thunder, etc., 1896-1920.

7.—Averages of Sunshine, Wind and Weather at Selected Canadian Stations— continued.

(The years indicate the period of observation on which averages are based.)

MONTREAL, QUE., lat. 45° 31' N., long. 73° 34' W.

Months.	Sunshine average.		Average no. days completely clouded.	Wind.					Average no. days with		
	No. of hours per month.	Per-centage of possible duration.		Average no. of gales.	Average hourly velocity.	Prevailing direction.	Strongest wind recorded.		Thunder.	Fog.	Hail.
							Miles per hour.	Direction.			
Jan.....	76.0	34	12	6	15.5	SW	56	SW	-	1	-
Feb.....	103.4	41	9	7	16.7	SW	66	NW	-	1	-
Mar.....	145.9	45	6	8	16.7	SW	60	SE, SW	-	1	-
April.....	173.7	50	6	4	14.9	S	53	SW	1	1	-
May.....	204.6	51	4	2	12.8	S	49	W	2	-	-
June.....	217.3	50	2	2	11.6	SW	48	SW, NW	3	-	-
July.....	238.4	59	1	1	11.3	W	42	SW	5	-	-
Aug.....	218.6	58	2	-	10.6	SW	36	W	4	-	-
Sept.....	171.5	53	4	1	11.7	SW	38	SE, NW	3	1	-
Oct.....	122.2	41	6	2	12.9	SW	45	NW	1	2	-
Nov.....	68.5	30	11	5	14.6	SW	58	W	-	1	-
Dec.....	60.0	26	14	5	14.0	SW	50	NW	-	1-	1
Year.....	1,800.1	-	77	43	13.6	SW	66	NW	19	9	1

¹Days clouded, 1901-1920; wind, etc., 1896-1920.QUEBEC¹, QUE., lat. 46° 48' N., long. 71° 12' W.

Jan.....	86	31.0	11	9	15.0	SW	62	NE	-	1	-
Feb.....	105	36.5	8	8	16.1	SW	69	NE	-	-	-
Mar.....	152	41.4	7	8	15.3	SW	72	NE	-	1	-
April.....	174	42.5	5	7	14.4	NE	54	NE	1	1	-
May.....	197	42.1	4	6	14.4	NE	52	W	2	-	-
June.....	248	44.6	4	4	13.2	SE	46	NE	4	-	-
July.....	223	46.8	2	2	11.6	S	43	NE, SW	7	-	-
Aug.....	224	48.4	2	1	10.7	SW	39	NE, SW	5	-	-
Sept.....	152	45.2	5	3	11.5	SW	42	NE	2	1	-
Oct.....	123	40.2	8	4	12.4	SW	66	NE	1	2	-
Nov.....	65	24.0	10	5	14.0	SW	58	NE	-	1	-
Dec.....	70	28.8	13	6	13.9	SW	68	NE	-	1	-
Year.....	1,819	-	79	63	13.5	S	72	NE	22	8	-

¹Sunshine, 1903-1912; days clouded, 1903-1920; wind, etc., 1896-1920.WOLFVILLE¹, N.S., lat. 45° 5' N., long. 64° 21' W.YARMOUTH¹, N.S., lat. 45° 53' N., long. 65° 45' W.

Jan.....	84.0	29.6	10	4	13.2	NW	53	SW, NW	-	2	-
Feb.....	99.6	34.4	10	4	13.1	NW	60	SW	-	2	-
Mar.....	134.0	36.4	8	4	12.5	SW	60	NW	-	4	-
April.....	147.6	36.6	7	2	11.1	SW	43	NW	-	4	-
May.....	200.8	43.8	5	1	9.9	SW	44	-	1	7	-
June.....	230.0	49.4	2	-	8.6	S	40	SE	2	7	-
July.....	235.6	50.2	2	-	7.7	SW	36	S	2	13	-
Aug.....	232.4	53.6	2	-	6.7	SW	65	SW	2	11	-
Sept.....	182.5	48.6	3	1	8.0	SW	48	W	1	7	-
Oct.....	151.4	44.8	7	2	10.0	S	51	SE	1	4	-
Nov.....	98.9	34.7	8	3	12.0	SW	60	-	-	2	-
Dec.....	67.2	24.8	11	3	12.6	SW	62	SW	-	2	-
Year.....	1,864.0	-	75	24	10.5	SW	65	SW	9	65	-

¹Sunshine, 1895-1910; days clouded, 1901-1920; wind, days with thunder, etc., 1896-1915.FREDERICTON¹, N.B., lat. 45° 56' N., long. 66° 40' W.

Jan.....	110.3	39.2	10	2	8.2	NW	38	SW	-	1	-
Feb.....	124.2	43.1	8	2	9.3	NW	49	NW	-	1	-
Mar.....	154.8	42.0	8	2	9.5	NW	40	NW	-	1	-
April.....	184.6	45.6	7	1	8.2	NW	36	NW	-	2	-
May.....	205.4	44.4	6	1	8.0	SW	37	NW	1	1	-
June.....	217.6	46.4	5	-	7.4	W	34	NW	2	1	-
July.....	236.8	50.2	3	-	6.6	SW	32	NW	3	2	-
Aug.....	223.0	51.2	3	-	6.7	W	28	NW	2	2	-
Sept.....	179.0	47.8	5	-	6.0	NW	30	NW	1	4	-
Oct.....	151.4	44.8	6	1	7.7	W	33	SE, NW	-	3	-
Nov.....	91.3	33.3	11	1	8.1	NW	37	-	-	2	-
Dec.....	94.1	35.9	12	2	8.5	NW	42	NW	-	2	-
Year.....	1,972.5	-	84	12	7.9	W	49	NW	9	22	-

¹Sunshine, 1881-1911; days clouded, 1901-1920; wind, etc., 1896-1920.

7.—Averages of Sunshine, Wind and Weather at Selected Canadian Stations— continued.

(The years indicate the period of observation on which averages are based.)

CHARLOTTETOWN¹, P.E.I., lat. 46° 14' N., long. 63° 8' W.

Months.	Sunshine average.		Average no. days completely clouded.	Wind.					Average no. days with		
	No. of hours per month.	Per-centage of possible duration.		Average no. of gales.	Average hourly velocity.	Prevailing direction.	Strongest wind recorded.		Thunder.	Fog.	Hail.
							Miles per hour.	Direction.			
Jan.....	89	31.8	13	2	8.8	NW	46	NW	—	—	—
Feb.....	112	38.9	10	1	8.4	SW	55	SE	—	1	—
Mar.....	130	35.3	9	2	8.6	S	41	SW	—	1	—
April.....	153	37.6	9	—	8.4	SE	33	SE	1	1	—
May.....	195	42.1	7	—	8.1	S	32	NE	1	—	—
June.....	226	48.2	6	—	7.0	S	28	S	2	—	—
July.....	238	50.2	4	—	6.3	SW	32	SW	2	—	—
Aug.....	229	52.4	5	—	6.5	SW	31	SW	2	—	—
Sept.....	179	47.8	6	—	7.2	SW	32	S, NW	1	—	—
Oct.....	114	33.9	11	1	8.2	SW	38	S	—	1	—
Nov.....	73	25.9	13	1	9.1	W	38	NE	—	1	—
Dec.....	60	22.3	17	1	9.0	NW	38	SW	—	—	—
Year.....	1,798	—	110	8	8.0	SW	55	SE	9	5	—

¹Sunshine, 1906-1916; days clouded, 1907-1920; wind, etc., 1896-1920.CALGARY¹, ALTA., lat. 51° 2' N., long. 114° 2' W.

Months.	Wind.					Average number of days with		
	Average number of gales.	Average hourly velocity.	Prevailing direction.	Strongest wind recorded.		Thunder.	Fog.	Hail.
				Miles p.h.	Direction.			
January.....	1	6.4	W	52	NW	—	—	—
February.....	1	6.6	W	48	W	—	—	—
March.....	1	7.6	SW	48	SW	—	—	—
April.....	1	8.5	W	56	NW	—	—	—
May.....	1	8.8	NW	48	N, NW	1	—	—
June.....	1	8.6	NW	50	W	1	—	1
July.....	1	7.6	NW	48	NW	3	—	—
August.....	1	7.3	NW	36	W	2	—	—
September.....	1	7.5	NW	62	NW	—	—	—
October.....	1	6.5	NW	40	W	—	—	—
November.....	1	6.0	W	36	Several.	—	—	—
December.....	1	6.5	W	52	W	—	—	—
Year.....	12	7.3	W	62	NW	7	—	1

¹Wind, days with thunder, etc., 1897-1916.PAS¹, MAN., lat. 53° 49' N., long. 101° 15' W.

January.....	1	7.5	W	43	NW	—	—	—
February.....	1	7.2	W	40	W	—	—	—
March.....	1	7.5	S	45	W	—	1	—
April.....	—	8.3	E	41	SW	—	—	—
May.....	—	8.5	E	40	—	—	—	—
June.....	2	7.8	SE	44	SW	2	—	—
July.....	1	8.9	W	54	SW	—	2	—
August.....	1	7.7	W	48	NW	2	1	—
September.....	1	6.8	W	41	NW	—	1	—
October.....	1	7.5	W	42	W	—	—	—
November.....	—	7.9	W	33	NW	—	—	—
December.....	—	7.1	SW	38	W	—	—	—
Year.....	9	7.7	W	54	SW	4	5	—

¹Wind, days with thunder, etc., 1910-1920.PORT NELSON¹, MAN., lat. 57° 0' N., long. 92° 56' W.

January.....	2	12.4	W	34	W, NW	—	1	—
February.....	3	12.9	W	48	NW	—	—	—
March.....	3	11.4	W	41	NE	—	1	—
April.....	2	12.8	SE	51	NW	—	1	—
May.....	1	12.4	NE	40	NE	—	3	—
June.....	3	13.6	NE	38	NE, NW	3	2	—
July.....	2	13.8	NE	53	NE	3	1	—
August.....	2	12.4	SW	42	NE, NW	2	2	—
September.....	3	12.8	SW	42	SW, NW	1	1	—
October.....	4	13.6	NW	40	—	—	1	—
November.....	5	13.1	NW	43	N	—	2	—
December.....	2	11.7	W	42	NW	—	—	—
Year.....	32	12.7	SW	53	NE	9	15	—

¹Wind, days with thunder, etc., 1916-1920.

7.—Averages of Sunshine, Wind and Weather at Selected Canadian Stations—concluded.

(The years indicate the period of observation on which averages are based.)

PORT ARTHUR¹, ONT., lat. 48° 27' N., long. 89° 13' W.

Months.	Wind.					Average number of days with		
	Average number of gales.	Average hourly velocity.	Prevailing direction	Strongest wind recorded.		Thunder.	Fog.	Hail.
				Miles per hour.	Direction.			
January.....	1	6.9	NW	37	NW	-	-	-
February.....	1	7.1	NW	50	NW	-	-	-
March.....	1	7.8	NW	52	NW	-	-	-
April.....	1	7.8	S	39	NW, NE	1	1	-
May.....	1	7.8	SE	41	NE	1	2	-
June.....	-	6.7	E	51	NW	2	2	-
July.....	-	6.4	S	34	NW	4	1	-
August.....	-	6.7	SW	41	NW	3	2	-
September.....	-	7.1	SW	62	NW	2	2	-
October.....	1	7.4	SW	42	NW	1	3	-
November.....	1	8.1	NW	40	NW	-	1	-
December.....	1	7.4	NW	52	NW	-	1	-
Year.....	8	7.3	SW	62	NW	14	15	-

¹Wind, days with thunder, etc., 1896-1920.

WHITE RIVER¹, ONT., lat. 51° 30' N., long. 94° 2' W.

January.....	-	4.2	SE	28	NW	-	-	-
February.....	-	3.3	E	22	S, NW	-	-	-
March.....	-	4.4	E	30	N	-	-	-
April.....	-	5.0	E	30	N	-	-	-
May.....	-	5.6	SE	28	SW	1	-	-
June.....	-	5.0	S	32	SW	1	-	-
July.....	-	4.4	SW	23	N	2	1	-
August.....	-	3.6	S	24	SW	2	1	-
September.....	-	3.9	SW	24	S	2	1	-
October.....	-	4.1	SE	25	SW	-	-	-
November.....	-	4.6	SE	25	NW, SW	-	-	-
December.....	-	3.7	S	24	S	-	-	-
Year.....	-	4.3	SE	32	SW	8	3	-

¹Wind, days with thunder, etc., 1896-1920.

COCHRANE¹, ONT., lat. 49° 4' N., long. 80° 58' W.

January.....	-	7.8	W	34	NW	-	-	-
February.....	-	7.2	NW	32	NW	-	-	-
March.....	-	8.2	SW	33	NW	-	-	-
April.....	-	8.4	SE	35	NW	-	-	-
May.....	-	8.5	S	35	NW	1	1	-
June.....	-	8.4	S	34	SW	2	-	-
July.....	-	7.1	W	29	SW	3	-	-
August.....	-	6.5	W	31	NW	2	-	-
September.....	-	7.3	SW	30	SW	1	1	-
October.....	-	7.2	SW	35	SE	-	1	-
November.....	-	6.6	SW	30	SW	-	1	-
December.....	-	6.8	NW	27	SW	-	1	-
Year.....	-	7.5	SW	35	NW, SE	9	5	-

¹Wind, days with thunder, etc., 1911-1920.

SOUTH WEST POINT¹, ANTICOSTI, QUE., lat. 49° 23' N., long. 63° 38' W.

January.....	16	21.9	NW	72	NW	-	-	-
February.....	13	19.9	SW	65	NW	-	-	-
March.....	12	18.6	S	68	NW	-	1	-
April.....	8	15.8	SE	70	NW	-	3	-
May.....	6	13.8	SE	52	NW	-	3	-
June.....	4	13.3	SE	56	W	-	5	-
July.....	3	12.1	SE	44	W	-	7	-
August.....	4	12.3	SE	68	W	-	5	-
September.....	6	14.3	SE	58	NW	-	3	-
October.....	10	16.6	S	67	W	-	4	-
November.....	11	18.8	SE	98	N	-	1	-
December.....	14	20.6	SW	71	NW	-	1	-
Year.....	107	16.5	S	98	N	-	34	-

¹Wind, days with thunder, etc., 1897-1920.

II.—HISTORY AND CHRONOLOGY.

I.—HISTORY.

In the 1922-23 edition of the Canada Year Book, on pages 60-80, will be found an outline of the history of Canada, revised and abridged from the article prepared for the 1913 Year Book under the direction of Arthur G. Doughty, C.M.G., LL.D., Deputy Minister, Public Archives of Canada. This article is not reprinted, for reasons of space.

The following select bibliography of historical works relating to Canada has been contributed by Adam Shortt, C.M.G., LL.D., F.R.S.C., Chairman of the Historical Documents Publication Board, Ottawa.

Select Bibliography of the History of Canada.

- Report of Select Committee on the State of the civil government of Canada, 1828.
Reports of Commissioners on the grievances complained of in Lower Canada (Lord Gosford, Sir G. Gipps, and Sir C. Grey.) 1837.
Lord Durham's report on B.N.A. and 5 appendices, 1839.
Appendices—(a) Clergy Reserves; (b) Public Lands and Emigration; (c) Municipal Institutions of L.C.; (d-e) Education and Feudal Tenures. (Twice reprinted in recent years by Messrs. Methuen, 1902, and by Clarendon Press, 1912.)
Correspondence *re* the affairs of Canada, June, 1840, to August, 1841. 1841.
Report of Select Committee on the H.B.C., 1857.
Papers *re* explorations conducted by Prof. H. Y. Hind. 4 maps of country from the Red River to the Saskatchewan, 1859.
Papers *re* explorations under Captain J. Palliser, 1859. 8 reports, June, 1857, to January, 1859. Map of route and several plans by J. Hector, the geologist. 1859.
Correspondence *re* Canadian tariff on British goods, Mar., 1859, to Apr., 1860. 1864.
Correspondence *re* the proposed union of the B.N.A. provinces, December, 1864, to January, 1867. 1867.
Documents relating to the Colonial History of the State of New York; procured in Holland, England and France, by John Romeyn Broadhead, Esq. Edited by E. B. O'Callaghan, M.D., LL.D. 11 vols. Albany, 1858. (Vols. ix and x, Paris Documents.)
Collection de Manuscrits contenant Lettres, Memoirs, et autres Documents Historiques relatifs à la Nouvelle-France. 4 vols. Quebec, 1883.
Charlevoix: Histoire et Description Générale de la Nouvelle-France, avec le Journal Historique d'un Voyage fait par ordre du Roi dans l'Amérique Septentrionale. 3 vols. Paris, 1774.
Gourlay: Statistical Account of Upper Canada. Compiled with a view to a Grand System of Emigration. 2 vols. and introduction. London, 1822.
Eighth and Ninth Reports of the Committee of the House of Assembly on that Part of the Speech of His Excellency the Governor in Chief which relates to the Settlement of the Crown Lands, with Minutes of Evidence taken before the Committee. Quebec, 1824.
Substance of Two Speeches, delivered in the House of Commons on the 21st and 25th of March, 1825, by the Right Hon. William Huskisson, respecting Colonial Policy and Foreign Commerce of the Country. London, 1825.
Seventh Report of the Select Committee of the House of Assembly of Upper Canada on Grievances. Toronto, 1835.
Kingsford: History of Canada. 10 vols. Toronto, 1887-98.
Documents relating to the Constitutional History of Canada, 1759-1791, selected and edited with notes by Adam Shortt and Arthur G. Doughty. Ottawa, 1907.
Ordinances for the Province of Quebec, 1764-90.

- Extra—Official State Papers. By a late Under-Secretary of State. (By Wm. Knox.) 2 vols. 1789.
- Weld: Travels through the States of North America, and the Provinces of Upper and Lower Canada, during the Years 1795, 1796 and 1797. 2 vols. London, 1800. (Vol. ii.)
- La Rochefoucault-Liancourt: Travels through the United States of North America, the Country of the Iroquois and Upper Canada, in the Years 1795, 1796 and 1797. 2 vols. London, 1799.
- Baring: An Inquiry into the Causes and Consequences of the Orders in Council; and an Examination of the Conduct of Great Britain towards the Neutral Commerce of America. London, 1808.
- Heriot: Travels through the Canadas, with an Account of the Productions, Commerce and Inhabitants of those Provinces. London, 1807.
- Gray: Letters from Canada, shewing the Present State of Canada, its Productions, Trade, Commercial Importance and Political Relations. London, 1809.
- The Colonial Policy of Great Britain, considered with Relation to her North American Provinces and West India Possessions, wherein the Dangerous Tendency of American Competition is developed and the necessity of recommending a Colonial System on a Vigorous and Extensive Scale exhibited and defended. London, 1816.
- Haliburton: An Historical and Statistical Account of Nova Scotia. 2 vols. Halifax, 1829.
- Canniff: History of the Settlement of Upper Canada. Toronto, 1869.
- The Canadas: Comprehending Topographical Information concerning the Quality of the Land, for the use of Emigrants and Capitalists. Compiled from Original Documents furnished by John Galt, Esq. London, 1836.
- Political Annals of Lower Canada. Montreal, 1828.
- Shipping Interest. Two Letters in Reply to the Speech of the Rt. Hon. W. Huskisson in the House of Commons, May 7th, 1827. London, 1827 (signed Mercator Loyds).
- Three Reports from the Select Committee appointed to enquire into the State of the Trade and Commerce of Upper Canada. 1835.
- Report from the Select Committee on Timber Duties; together with the Minutes of Evidence, and Appendix, and Index. (London Govt. Print.) 1836.
- Bouchette: The British Dominions in North America; or, a Topographical and Statistical Description of the Provinces of Lower and Upper Canada, New Brunswick, Nova Scotia, the Islands of Newfoundland, Prince Edward, and Cape Breton. 2 vols. London, 1832.
- Martin: Statistics of the Colonies of the British Empire. From the Official Records of the Colonial Office. First edition, London, 1839. Later edition, 1847.
- Christie: A History of the Late Province of Lower Canada. 6 vols. Quebec, 1848.
- Murdoch: A History of Nova-Scotia, or Acadie. 3 vols. Halifax, 1867. (Vol. iii.)
- Chalmers: A History of Currency in the British Colonies. London, n.d. (1894).
- The Currency of the British Colonies. (By James Pennington.) London, 1848.
- Wier: Sixty Years in Canada. Montreal, 1903.
- The Canadian Merchants' Magazine and Commercial Review. 2 vols. Toronto, 1857-58.
- Chisholm: Letters and Speeches of Joseph Howe. 2 vols. Halifax, 1909.
- Correspondence relative to the Affairs of Lower Canada, 1841. London, 1841. (Union of the two Canadas. Their financial situation. Emigration. Official correspondence between Lord Russell, Sir George Arthur and Lord Sydenham.)
- Parliamentary Debates on the Subject of Confederation of the British North American Provinces.
- Dent: Last Forty Years. 2 vols. Toronto, 1881.
- Elgin: Letters and Journals of James, Eighth Earl of Elgin. Edited by Walrond. London, 1872.
- Grey, Earl: Colonial Policy of Lord J. Russell's Administration. 2 vols. London, 1853.
- Hincks: Reminiscences of his Public Life. Montreal, 1884.
- Pope: Memoirs of Sir John A. Macdonald. 2 vols. London, 1894.

- Shortt: Lord Sydenham. Toronto, 1909.
- Todd: Parliamentary Government in the British Colonies. London, 1894.
- Turcotte: Le Canada sous l'Union 1841-1867. 2 vols. Quebec, 1871.
- Walrond: Letters of Lord Elgin. London, 1872.
- Campbell: Nova Scotia in its Historical, Mercantile and Industrial Relations. Montreal, 1873.
- The Report of Israel D. Andrews, Consul of the United States for Canada and New Brunswick, on the Trade and Commerce of the British North American Colonies, and upon the Trade of the Great Lakes and Rivers. Washington, 1854.
- Keefer: A Sketch of the Rise and Progress of the Reciprocity Treaty, with an Explanation of the Services rendered in connection therewith. Toronto, 1863.
- Morgan: Dominion Annual Register, 1878-1889.
- Breckenridge: History of Banking in Canada. Washington, 1910.
- Akins: Selections from the Public Documents of Nova Scotia. Halifax, 1869.
- Campbell: History of Prince Edward Island. Halifax, 1875.
- McGregor: Historical and Descriptive Sketches of the Maritime Colonies of British America. London, 1828.
- MacMechan: Nova Scotia Archives, vols. ii and iii. Halifax, 1900, 1908.
- Raymond: Winslow Papers, A.D. 1776-1826. St. John, 1901.
- Day: History of the Eastern Townships. Montreal, 1869.
- Cartwright: Life and Letters of the late Hon. Richard Cartwright. Toronto, 1876.
- Robinson: Life of Sir John Beverley Robinson. Edinburgh, 1904.
- Smith, Wm.: History of Canada. 2 vols. Quebec, 1815.
- The Life and Times of Sir Alexander Tilloch Galt, by Oscar Douglas Skelton. Toronto. Oxford University Press, 1920.
- Life and Letters of Sir Wilfrid Laurier, by Oscar Douglas Skelton. Illustrated with Photographs. Vols. i and ii. Oxford University Press. Toronto, 1921.
- Sir Wilfrid Laurier and the Liberal Party. A Political History. By J. S. Willison. In two volumes. Toronto. George N. Morang & Company, Ltd. 1903.
- Canada and Its Provinces. A history of the Canadian People and their Institutions. Adam Shortt and Arthur G. Doughty, general editors. In twenty-three volumes. Edinburgh University Press. Toronto, 1917.

II.—CHRONOLOGICAL HISTORY OF CANADA, 1497 to 1924.

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| 1497. June 24, Eastern coast of North America discovered by John Cabot. | 1610-11. Hudson explores Hudson bay and James bay. |
| 1498. Cabot discovers Hudson strait. | 1611. Brul  ascends the Ottawa river. |
| 1501. Gaspar Corte Real visits Newfoundland and Labrador. | 1612. Oct. 15, Champlain made lieutenant-general of New France. |
| 1524. Verrazano explores the coast of Nova Scotia. | 1613. June, Champlain ascends the Ottawa river. |
| 1534. June 21, Landing of Jacques Cartier at Esquimaux bay. | 1615. Champlain explores lakes Nipissing, Huron and Ontario (Discovered by Brul  and Le Caron). |
| 1535. Cartier's second voyage. He ascends the St. Lawrence to Stadacona (Quebec), (Sept. 14) and Hochelaga (Montreal), (Oct. 2). | 1616. First schools opened at Three Rivers and Tadoussac. |
| 1541. Cartier's third voyage. | 1620. Population of Quebec, 60 persons. |
| 1542-3. De Roberval and his party winter at Cap Rouge, and are rescued by Cartier on his fourth voyage. | 1621. Code of laws issued, and register of births, deaths and marriages opened in Quebec. |
| 1557. Sept. 1, Death of Cartier at St. Malo, France. | 1622. Lake Superior discovered by Brul . |
| 1592. Straits of Juan de Fuca discovered by de Fuca. | 1623. First British settlement of Nova Scotia. |
| 1603. June 22, Champlain's first landing in Canada, at Quebec. | 1627. New France and Acadia granted to the Company of 100 Associates. |
| 1605. Founding of Port Royal (Annapolis, N.S.). | 1628. Port Royal taken by Sir David Kirke. |
| 1608. Champlain's second visit. July 3, Founding of Quebec. | 1629. April 24, Treaty of Susa between France and England. July 20, Quebec taken by Sir David Kirke. |
| 1609. July, Champlain discovers lake Champlain. | 1632. March 29, Canada and Acadia restored to France by the Treaty of St. Germain-en-Laye. |

1633. May 23, Champlain made first governor of New France.
1634. July 4, Founding of Three Rivers.
- 1634-35. Exploration of the Great Lakes by Nicolet.
1635. Dec. 25, Death of Champlain at Quebec.
1638. June 11, First recorded earthquake in Canada.
1640. Discovery of lake Erie by Chammonot and Brébeuf.
1641. Resident population of New France, 240.
1642. May 17, Founding of Ville-Marie (Montreal).
1646. Exploration of the Saguenay by Dablon.
1647. Lake St. John discovered by de Quen.
1648. March 5, Council of New France created.
1649. March 16-17, Murder of Fathers Brébeuf and Lalemant by Indians.
1654. Aug., Acadia taken by an expedition from New England.
1655. Nov. 3, Acadia restored to France by the Treaty of Westminster.
1659. June 16, Francois de Laval arrives in Canada as Vicar-Apostolic.
1660. May 21, Dollard des Ormeaux and sixteen companions killed at the Long Sault, Ottawa river.
1663. Company of 100 Associates dissolves. Feb. 5, severe earthquake. April, Sovereign Council of New France established. Population of New France, 2,500, of whom 800 were in Quebec.
1664. May, Company of the West Indies founded.
1665. Mar. 23, Talon appointed intendant. Population of New France, 3,215.
1667. July 21, Acadia restored to France by the Treaty of Breda. White population of New France, 3,918.
1668. Mission at Sault Ste. Marie founded by Marquette.
1670. May 13, Charter of the Hudson's Bay Company granted.
1671. Population of Acadia, 441.
1672. Population of New France, 6,705. April 6, Comte de Frontenac governor.
1673. June 13, Cataraqui (Kingston) founded.
1674. Oct. 1, Laval becomes first Bishop of Quebec.
1675. Population of New France, 7,832.
1678. Niagara Falls visited by Hennepin.
1679. Ship *Le Griffon* built on Niagara river above the falls by La Salle. Population of New France, 9,400; of Acadia, 515.
1682. Frontenac recalled.
1683. Population of New France, 10,251.
1685. Card money issued.
1686. Population of New France, 12,373; of Acadia, 885.
1687. March 18, La Salle assassinated.
1689. June 7, Frontenac reappointed governor. Aug. 5, Massacre of whites by Indians at Lachine.
1690. May 21, Sir William Phipps captures Port Royal, but is repulsed in an attack on Quebec (Oct. 16-21).
1691. Kelsey, of the Hudson's Bay Co., reaches the Rocky mountains.
1692. Population of New France, 12,431. Oct. 22, Defence of Verchères against Indians by Magdeleine de Verchères.
1693. Population of Acadia, 1,009.
1697. Sept. 20, by the Treaty of Ryswick, places taken during the war were mutually restored. D'Iberville defeats the Hudson's Bay Co.'s ships on Hudson bay.
1698. Nov. 28, Death of Frontenac. Population of New France, 15,355.
1703. June 16, Sovereign Council of Canada becomes Superior Council and membership increased from 7 to 12.
1706. Population of New France, 16,417.
1709. British invasion of Canada.
1710. Oct. 13, Port Royal taken by Nicholson.
1711. Sept. 1, Part of Sir H. Walker's fleet, proceeding against Quebec, wrecked off the Seven Islands.
1713. April 11, Treaty of Utrecht; Hudson bay, Acadia and Newfoundland ceded to Great Britain. Aug., Louisbourg founded by the French. Population of New France, 18,119.
1720. Population of New France, 24,324; of Isle St. Jean (P.E.I.), about 100. April 25, Governor and Council of Nova Scotia appointed.
1721. June 19, burning of about one half of Montreal.
1727. Population of New France, 30,613.
1728. Population of Isle St. Jean (P.E.I.), 330.
1731. Population of the north of the peninsula of Acadia, 6,000.
1734. Road opened from Quebec to Montreal. Population of New France, 37,716.
1737. Iron smelted at St. Maurice. French population of the north of the Acadia peninsula, 7,598.
1739. Population of New France, 42,701.
1745. June 17, Taking of Louisbourg by Pepperell and Warren.
1747. Marquis de La Jonquière appointed governor, captured at sea by the English, took office Aug. 15, 1749.
1748. Oct. 18, Treaty of Aix-la-Chapelle. Louisbourg restored to France in exchange for Madras.
1749. June 21, Founding of Halifax—British immigrants brought to Nova Scotia by Governor Cornwallis, 2,544 persons. Fort Rouillé (Toronto) built.
1750. St. Paul's Church, Halifax (oldest Anglican church in Canada) built.
1752. March 25, Issue of the Halifax "Gazette," first paper in Canada. British and German population of Nova Scotia, 4,203. May, 17, Death of La Jonquière.

1754. Population of New France, 55,009.
1755. July 10, Marquis de Vaudreuil-Cavagnal governor. Sept. 10, Expulsion of the Acadians from Nova Scotia.
1756. Seven Years' War between Great Britain and France.
1758. July 26, Final capture of Louisbourg by the British. Oct. 7, First meeting of the Legislature of Nova Scotia.
1759. July 25, Taking of Fort Niagara by the British. July 26, Beginning of the Siege of Quebec. July 31, French victory at Beauport Flats. Sept. 13, Defeat of the French on the Plains of Abraham. Death of Wolfe. Sept. 14, Death of Montcalm. Sept. 18, Surrender of Quebec.
1760. April 28, Victory of the French under Levis at Ste. Foy. Sept. 8, Surrender of Montreal. Military rule set up in Canada. Population of New France, 70,000.
1762. British population of Nova Scotia, 8,104. First British settlement in New Brunswick.
1763. Feb. 10, Treaty of Paris by which Canada and its dependencies are ceded to the British. May, Rising of Indians under Pontiac, who take a number of forts and defeat the British at Bloody Run (July 31). Oct. 7, Civil government proclaimed. Cape Breton and Isle St. Jean annexed to Nova Scotia; Labrador, Anticosti and Magdalen islands to Newfoundland. Nov. 21, General Jas. Murray appointed governor in chief. First Canadian post offices established at Montreal, Three Rivers and Quebec.
1764. June 21, First issue of the Quebec "Gazette." Aug. 13, Civil government established.
1765. Publication of the first book printed in Canada, "Catéchisme du Diocèse de Sens." May 18, Montreal nearly destroyed by fire. Population of Canada, 69,810.
1766. July 24, Peace made with Pontiac at Oswego.
1768. Charlottetown, P.E.I., founded. April 11, Great fire at Montreal. April 12, Sir Guy Carleton (Lord Dorchester) governor in chief.
1769. Isle St. Jean (Prince Edward Island) separated from Nova Scotia, with governor and council.
- 1770-72. Hearne's journey to the Coppermine and Slave rivers and Great Slave lake.
1773. Suppression of the order of Jesuits in Canada and escheat of their estates.
1774. June 22, The Quebec Act passed.
1775. May 1, The Quebec Act comes into force. Outbreak of the American Revolution. Montgomery and Arnold invade Canada. Nov. 12, Montgomery takes Montreal; Dec. 31, is defeated and killed in an attack on Quebec.
1776. The Americans are defeated and driven from Canada by Carleton.
1777. Sept. 18, General Frederick Haldimand governor in chief.
1778. Captain Jas. Cook explores Nootka sound and claims the north-west coast of America for Great Britain. June 3, First issue of the Montreal "Gazette."
1783. Sept. 3, Treaty of Versailles, recognizing the independence of the United States. Organization of the Northwest Company at Montreal. Kingston, Ont., and St. John, N.B., founded by United Empire Loyalists.
1784. Population of Canada, 113,012. Aug. 16, New Brunswick and (Aug. 26) Cape Breton separated from Nova Scotia.
1785. May 18, Incorporation of Parrottown (St. John, N.B.).
1786. April 22, Lord Dorchester again governor in chief. Oct. 23, Government of New Brunswick moved from St. John to Fredericton.
1787. C. Inglis appointed Anglican bishop of Nova Scotia—first colonial bishopric in the British Empire.
1788. King's College, Windsor, N.S., opened. Sailing packet service established between Great Britain and Halifax.
1789. Quebec and Halifax Agricultural Societies established.
1790. Spain surrenders her exclusive rights on the Pacific coast. Population of Canada, 161,311. (This census does not include what becomes in the next year Upper Canada.)
1791. The Constitutional Act divides the province of Quebec into Upper and Lower Canada, each with a lieutenant-governor and legislature. The Act goes into force Dec. 26. Sept. 12, Colonel J. G. Simcoe, first lieutenant-governor of Upper Canada.
1792. Sept. 17, First legislature of Upper Canada opened at Newark (Niagara). Dec. 17, First legislature of Lower Canada opened at Quebec. Vancouver island circumnavigated by Vancouver.
1793. April 18, First issue of the "Upper Canada Gazette." June 28, Jacob Mountain appointed first Anglican bishop of Quebec. July 9, Importation of slaves into Upper Canada forbidden. Rocky mountains crossed by (Sir) Alexander Mackenzie. York (Toronto) founded by Simcoe.
1794. Nov. 19, Jay's Treaty between Great Britain and the United States.

1795. Pacific Coast of Canada finally given up by the Spaniards.
1796. Government of Upper Canada moved from Niagara to York (Toronto).
1798. St. John's Island (population 4,500) re-named Prince Edward Island.
1800. Founding of New Brunswick College, Fredericton (now University of N.B.). The Rocky mountains crossed by David Thompson.
1803. Settlers sent by Lord Selkirk to Prince Edward Island.
1806. Nov. 22, Issue of "Le Canadien"—first wholly French newspaper. Population—Upper Canada, 70,718; Lower Canada, 250,000; New Brunswick, 35,000; P.E.I., 9,676.
1807. Simon Fraser explores the Fraser river. Estimated population of Nova Scotia, 65,000.
1809. Nov. 4, First Canadian steamer runs from Montreal to Quebec.
1811. Lord Selkirk's Red River settlement founded, on land granted by Hudson's Bay Company.
1812. June 18, Declaration of war by the United States. July 12, Americans under Hull cross the Detroit river. Aug. 16, Detroit surrendered by Hull to Brock. Oct. 13, Defeat of the Americans at Queenston Heights and death of Gen. Brock.
1813. Jan. 22, British victory at Frenchtown. April 27, York (Toronto) taken and burned by the Americans. June 5, British victory at Stony Creek. June 24, British, warned by Laura Secord, capture an American force at Beaver Dams. Sept. 10, Commodore Perry destroys the British flotilla on lake Erie. Oct. 5, Americans under Harrison defeat the British at Moraviantown. Tecumseh killed. Oct. 26, Victory of French-Canadian troops under de Salaberry at Chateauguay. Nov. 11, Defeat of the Americans at Crysler's Farm. British storm Fort Niagara and burn Buffalo.
1814. March 30, Americans repulsed at La Colle. May 6, Capture of Oswego by the British. July 5, American victory at Chippawa. July 25, British victory at Lundy's Lane. July, British from Nova Scotia invade and occupy northern Maine. Sept. 11, British defeat at Plattsburg on lake Champlain. Dec. 24, Treaty of Ghent ends the war. Population—Upper Canada, 95,000; Lower Canada, 335,000.
1815. July 3, Treaty of London regulates trade with the United States. The Red River settlement destroyed by the Northwest Company but restored by Governor Semple.
1816. June 19, Governor Semple killed.
- The Red River settlement again destroyed.
1817. July 18, First treaty with the Northwest Indians. Lord Selkirk restores the Red River settlement. Opening of the Bank of Montreal; first note issued Oct. 1. Population of Nova Scotia, 81,351.
1818. Oct. 20, Convention at London regulating North American fisheries. Dalhousie College, Halifax, founded. Bank of Quebec founded.
- 1819-22. Franklin's overland Arctic expedition.
1820. Oct. 16, Cape Breton re-annexed to Nova Scotia.
1821. March 26, The Northwest Company absorbed by the Hudson's Bay Company. Charter given to McGill College.
1822. Population of Lower Canada, 427,465.
1824. Population of Upper Canada, 150,066; of New Brunswick, 74,176.
1825. Oct. 6, Great fire in the Miramichi district, N.B. Opening of the Lachine canal. Population of Lower Canada, 479,288.
1826. Founding of Bytown (Ottawa).
1827. Sept. 29, Convention of London relating to the territory west of the Rocky mountains. Population of Nova Scotia, including Cape Breton, 123,630.
1828. The Methodist Church of Upper Canada separated from that of the United States.
1829. Nov. 27, First Welland canal opened. Upper Canada College founded.
1831. June 1, The North Magnetic Pole discovered by (Sir) James Ross. Population — Upper Canada, 236,702; Lower Canada, 553,131; Assiniboia, 2,390.
1832. Outbreak of cholera in Canada. Incorporation of Quebec and Montreal. Bank of Nova Scotia founded. May 30, Opening of the Rideau canal.
1833. Aug. 18, The steamer *Royal William*, built at Quebec, leaves Pictou for England.
1834. Feb. 21, The Ninety-two Resolutions on public grievances passed by the Assembly of Lower Canada. Mar. 6, Incorporation of Toronto. Population of Upper Canada, 321,145; of New Brunswick, 119,457; of Assiniboia, 3,356.
1836. July 21, Opening of the first railway in Canada from Laprairie to St. John's, Que. Victoria University opened at Cobourg (afterwards moved to Toronto).
1837. Report of the Canada Commissioners. Rebellions in Lower Canada (Papineau) and Upper Canada (W. L. Mackenzie). Nov. 23, Gas lighting first used in Montreal.
1838. Feb. 10, Constitution of Lower Canada suspended and Special

- Council created. March 30, The Earl of Durham governor in chief. April 27, Martial law revoked. June 28, Amnesty to Political prisoners proclaimed. Nov. 1, Lord Durham, censured by British Parliament, resigns. Population—Upper Canada, 339,422; Assiniboia, 3,966; Nova Scotia, 202,575.
1839. Feb. 11, Lord Durham's report submitted to Parliament. John Strachan made first Anglican bishop of Toronto.
1840. July 23, Passing of the Act of Union. First ship of the Cunard line arrives at Halifax. July 28, death of Lord Durham.
1841. Feb. 10, Union of the two provinces as the province of Canada, with Kingston as capital. Feb. 13, Draper-Ogden administration. April 10, Halifax incorporated. June 13, Meeting of first united Parliament. Sept. 19, Death of Lord Sydenham. Population of Upper Canada, 455,688; of P.E.I., 47,042.
1842. March 10, Opening of Queen's University, Kingston. Aug. 9, The Ashburton Treaty. Sept. 16, Baldwin-Lafontaine administration.
1843. June 4, Victoria, B.C., founded. Dec. 12, Draper-Viger administration. King's (now University) College, Toronto, opened.
1844. May 10, Capital moved from Kingston to Montreal. Knox College, Toronto, founded. Population of Lower Canada, 697,084.
1845. May 28 and June 28, Great fires at Quebec. Franklin starts on his last Arctic expedition.
1846. May 18, Kingston incorporated. June 15, Oregon Boundary Treaty. June 18, Draper-Papineau administration.
1847. May 29, Sherwood-Papineau administration. Electric telegraph service opened; Aug. 3, Montreal to Toronto; Oct. 2, Montreal to Quebec. Nov. 25, Montreal-Lachine railway opened.
1848. March 11, Lafontaine-Baldwin administration. May 30, Fredericton incorporated. Responsible government granted to Nova Scotia and New Brunswick.
1849. April 25, Signing of the Rebellion Losses Act; rioting in Montreal and burning of the Parliament buildings. Nov. 14, Toronto made the capital. Vancouver island granted to the Hudson's Bay Company. Population of Assiniboia, 5,391.
1851. April 6, Transfer of the postal system from the British to the Provincial Government; uniform rate of postage introduced. April 23, Postage stamps issued. Aug. 2, Incorporation of Trinity College, Toronto. Sept. 22, Quebec becomes the capital. Oct. 28, Hincks-Morin administration. Responsible government granted to Prince Edward Island. Population — Upper Canada, 952,004; Lower Canada, 890,261; New Brunswick, 193,800; Nova Scotia, 276,854.
1852. July 8, Great fire at Montreal. Dec. 8, Laval University, Quebec, opened. The Grand Trunk railway chartered.
1854. June 5, Reciprocity Treaty with the United States. Sept. 11, MacNab-Morin ministry. Seigneurial tenure in Lower Canada abolished. Secularization of the clergy reserves.
1855. Jan. 1, Incorporation of Ottawa. Jan. 27, MacNab-Taché administration. March 9, Opening of the Niagara suspension bridge. April 17, Incorporation of Charlottetown. Oct. 20, Government moved to Toronto.
1856. The Legislative Council of Canada is made elective. First meeting of the legislature of Vancouver island. May 24, Taché-J. A. Macdonald administration. Oct. 27, Opening of the Grand Trunk railway from Montreal to Toronto. Population of Assiniboia, 6,691.
1857. Nov. 26, J. A. Macdonald-Cartier administration. Dec. 31, Ottawa chosen by Queen Victoria as future capital of Canada.
1858. Feb., Discovery of gold in Fraser River valley. July 1, Introduction of Canadian decimal currency. Aug. 2, Brown-Dorion administration. Aug. 5, Completion of the Atlantic cable; first message sent. Aug. 6, Cartier-J. A. Macdonald administration. Aug. 20, Colony of British Columbia established. Control of Vancouver island surrendered by the Hudson's Bay Company.
1859. Jan., Canadian silver coinage issued. Sept. 24, Government moved to Quebec.
1860. Aug. 8, The Prince of Wales (King Edward VII) arrives at Quebec. Sept. 1, Laying of the corner stone of the Parliament buildings at Ottawa by the Prince of Wales. Prince of Wales College, Charlottetown, founded.
1861. Aug. 14, Great flood at Montreal. Sept. 10, Meeting of the first Anglican provincial synod. Population—Upper Canada, 1,396,091; Lower Canada, 1,111,566; New Brunswick, 252,047; Nova Scotia, 330,857; Prince Edward Island, 80,857.
1862. May 24, Sandfield Macdonald-Sicotte administration. Aug. 2, Victoria, B.C., incorporated.
1863. May 16, Sandfield Macdonald-Dorion administration.
1864. March 30, Taché-J. A. Macdonald administration. Conferences on confederation of British North

- America; Sept. 1, at Charlotte-town; Oct. 10-29, at Quebec. Oct. 19, Raid of American Confederates from Canada on St. Albans, Vermont.
1865. Feb. 3, The Canadian Legislature resolves on an address to the Queen praying for union of the provinces of British North America. Aug. 7, Belleau-J. A. Macdonald administration. Oct. 20, Proclamation fixing the seat of government at Ottawa.
1866. Mar. 17, Termination of the Reciprocity Treaty by the United States. May 31, Raid of Fenians from the United States into Canada; they are defeated at Ridgeway (June 2) and retreat across the border (June 3). June 8, First meeting at Ottawa of the Canadian legislature. Nov. 17, Proclamation of the union of Vancouver island to British Columbia.
1867. March 29, Royal assent given to the British North America Act. July 1, The Act comes into force; Union of the provinces of Canada, Nova Scotia and New Brunswick as the Dominion of Canada; Upper and Lower Canada made separate provinces as Ontario and Quebec; Viscount Monck first governor general, Sir John A. Macdonald premier. Nov. 6, Meeting of the first Dominion Parliament.
1868. April 7, Murder of D'Arcy McGee at Ottawa. July 31, The Rupert's Land Act authorizes the acquisition by the Dominion of the Northwest Territories.
1869. June 22, Act providing for the government of the Northwest Territories. Nov. 19, Deed of surrender to the Crown of the Hudson's Bay Company's territorial rights in the Northwest. Outbreak of the Red River Rebellion under Riel.
1870. May 12, Act to establish the province of Manitoba. July 15, Northwest Territories transferred to the Dominion and Manitoba admitted into Confederation. Sept. 24, Wolseley's expedition reaches Fort Garry (Winnipeg); end of the rebellion.
1871. April 2, First Dominion census (populations at this and succeeding enumerations given in section on population). April 14, Act establishing uniform currency in the Dominion. May 8, Treaty of Washington, dealing with questions outstanding between the United Kingdom and United States. July 20, British Columbia enters Confederation.
1873. March 5, Opening of the second Dominion Parliament. May 23, Act establishing the Northwest Mounted Police. July 1, Prince Edward Island enters Confederation. Nov. 7, Alexander Mac-
- kenzie premier. Nov. 8, Incorporation of Winnipeg.
1874. March 26, Opening of the third Dominion Parliament. May, Ontario Agricultural College, Guelph, opened.
1875. April 8, The Northwest Territories Act establishes a Lieutenant-Governor and Council of the Northwest Territories. June 15, Formation of the Presbyterian Church of Canada.
1876. June 1, Opening of the Royal Military College, Kingston. June 5, First sitting of the Supreme Court of Canada. July 3, Opening of the Intercolonial Railway from Quebec to Halifax.
1877. June 20, Great fire at St. John, N.B. Oct., First exportation of wheat from Manitoba to the United Kingdom. Founding of the University of Manitoba.
1878. July 1, Canada joins the International Postal Union. Oct. 17, Sir J. A. Macdonald premier.
1879. Feb. 13, Opening of the fourth Dominion Parliament. May 15, Adoption of a protective tariff ("The National Policy").
1880. Royal Canadian Academy of Arts founded; first meeting and exhibition, March 6. May 11, Sir A. T. Galt appointed first Canadian High Commissioner in London. Sept. 1, All British possessions in North America and adjacent islands, except Newfoundland and its dependencies, annexed to Canada by Imperial Order in Council of July 31. Oct. 21, Signing of the contract for the construction of the Canadian Pacific railway.
1881. April 4, Second Dominion census. May 2, First sod turned of the Canadian Pacific railway.
1882. May 8, Provisional Districts of Assiniboia, Saskatchewan, Athabaska and Alberta formed. May 25, First meeting of the Royal Society of Canada. Aug. 23, Regina established as seat of government of Northwest Territories.
1883. Feb. 1, Opening of the fifth Dominion Parliament. September 5, Formation of the Methodist Church in Canada; United Conference.
1884. May 24, Sir Charles Tupper High Commissioner in London. Aug. 11, Order in Council settling the boundary of Ontario and Manitoba.
1885. March 26, Outbreak of Riel's second rebellion in the Northwest. April 24, Engagement at Fish Creek. May 2, Engagement at Cut Knife. May 12, Taking of Batoche. May 16, Surrender of Riel. Aug. 24, First census of the Northwest Territories. Nov. 16, Execution of Riel.
1886. April 6, Incorporation of Vancouver. June 7, Archbishop Taschereau

- of Quebec made first Canadian cardinal. June 13, Vancouver destroyed by fire. June 28, First through train on the Canadian Pacific railway from Montreal to Vancouver. July 31, First quinquennial census of Manitoba.
1887. Interprovincial Conference at Quebec. April 4, First Intercolonial Conference in London. April 13, Opening of the sixth Dominion Parliament.
1888. Feb. 15, Signing of Fishery Treaty between United Kingdom and United States at Washington. Aug., Rejection of Fishery Treaty by United States Senate.
1890. March 31, The Manitoba School Act abolishes separate schools.
1891. April 5, Third Dominion census. April 29, Opening of the seventh Dominion Parliament. June 6, Death of Sir J. A. Macdonald. June 15, Sir John Abbott premier.
1892. Feb. 29, Washington Treaty, providing for arbitration of the Behring Sea Seal Fisheries question. July 22, Boundary convention between Canada and the United States. Nov. 25, Sir John Thompson premier.
1893. April 4, First sitting of the Behring Sea Arbitration Court. Dec. 18, Archbishop Machray, of Rupert's Land, elected first Anglican primate of all Canada.
1894. June 28, Colonial Conference at Ottawa. Dec. 12, Death of Sir John Thompson at Windsor Castle. Dec. 21, (Sir) Mackenzie Bowell premier.
1895. Sept. 10, Opening of new Sault Ste. Marie canal. Oct. 2, Proclamation naming the Ungava, Franklin, Mackenzie and Yukon districts of Northwest Territories.
1896. April 24, Sir Donald Smith (Lord Strathcona) High Commissioner in London. April 27, Sir Charles Tupper premier. July 11, (Sir) Wilfrid Laurier premier. Aug., Gold discovered in the Klondyke. Aug. 19, Opening of the eighth Dominion Parliament.
1897. July, Third Colonial Conference in London. Dec. 17, Award of the Behring Sea Arbitration Court.
1898. June 13, The Yukon district established as a separate territory. Aug. 1, The British Preferential Tariff of Canada goes into force. Aug. 23, Meeting at Quebec of the Joint High Commission between Canada and the United States. Dec. 25, British Imperial Penny (2 cent) Postage introduced.
1899. Oct. 11, Beginning of the South African war. Oct. 29, First Canadian contingent leaves Quebec for South Africa.
1900. Feb. 27, Battle of Paardeberg. April 26, Great fire at Ottawa and Hull.
1901. Jan. 22, Death of Queen Victoria and accession of King Edward VII. Feb. 6, Opening of the ninth Dominion Parliament. April 1, Fourth Dominion census. Sept. 16-Oct. 21, Visit to Canada of the Duke and Duchess of Cornwall and York (King George V and Queen Mary).
1902. May 31, End of South African War; peace signed at Vereeniging. June 30, Meeting of fourth Colonial Conference in London.
1903. Jan. 24, Signing of the Alaska Boundary Convention. June 19, Incorporation of Regina. Oct. 20, Award of the Alaskan Boundary Commission.
1904. Feb. 1, Dominion Railway Commission established. April 19, Great fire in Toronto. Oct. 8, Incorporation of Edmonton.
1905. Jan. 11, Opening of the tenth Dominion Parliament. Sept. 1, Creation of the provinces of Alberta and Saskatchewan.
1906. University of Alberta founded. Oct. 8, Interprovincial Conference at Ottawa.
1907. March 22, Industrial Disputes Investigation Act passed. April 15-May 14, Fifth Colonial Conference in London. New customs tariff including introduction of intermediate tariff. Sept. 19, New commercial convention with France signed at Paris. Oct. 17, First message by wireless telegraphy between Canada and the United Kingdom. University of Saskatchewan founded.
1908. Jan. 2, Establishment of Ottawa branch of Royal Mint. April 11, Arbitration treaty between United Kingdom and United States. May 4, Ratification of Treaty for demarcation of boundary between Canada and United States. June 21-23, Bicentenary of Bishop Laval celebrated at Quebec. July 20-31, Quebec tercentenary celebrations: visit to Quebec of Prince of Wales. Aug. 2, Great fire in Kootenay Valley, B.C. University of British Columbia founded.
1909. Jan. 11, Signing of International Boundary Waters Convention between Canada and United States. Jan. 20, opening of 11th Dominion Parliament. May 19, Appointment of Canadian Commission of Conservation. July 28, Conference on Imperial Defence in London.
1910. May 4, Passing of Naval Service Bill. May 6, Death of King Edward VII and accession of King George V. June 7, Death of Goldwin Smith. Sept. 7, North Atlantic Coast Fisheries Arbitration award of the Hague Tribunal. New trade agreement made with Germany, Belgium, Holland and Italy.

1911. May 23-June 20, Imperial Conference in London. June 1, Fifth Dominion census. July 11, Disastrous fires in Porcupine district. Sept. 21, General election. Oct. 10, (Sir) R. L. Borden premier. Oct. 11, Inauguration at Kitchener of Ontario hydro-electric power transmission system. Nov. 15, Opening of 12th Dominion Parliament.
1912. April 15, Loss of the steamship *Titanic*. April 15, Appointment of Dominions Royal Commission. May 15, Extension of the boundaries of Quebec, Ontario and Manitoba. June 17, Judgment delivered by the Imperial Privy Council on the marriage question raised by the *ne temere* decree.
1913. April 10, Japanese Treaty Act assented to. June 2, Trade agreement with West Indies came into force.
1914. Jan. 21, Death of Lord Strathcona and Mount Royal, aged 94. May 29, Loss of the steamship *Empress of Ireland*. Aug. 4, war with Germany; Aug. 12, with Austria-Hungary; Nov. 5, with Turkey. Aug. 18-22, Special war session of Canadian Parliament. Oct. 16, First Canadian contingent of over 33,000 troops land at Plymouth, Eng.
1915. Feb., First Canadian contingent lands in France and proceeds to Flanders. April 22, Second battle of Ypres. April 24, Battle of St. Julien. May 20-26, Battle of Festubert. June 15, Battle of Givenchy; gallantry of Canadian troops highly eulogized by F.-M. Sir John French. Oct. 30, Death of Sir Charles Tupper. Nov. 22, Issue of Canadian War Loan of \$50,000,000. Nov. 30, War loan increased to \$100,000,000.
1916. Jan. 12, Order in Council authorizing increase in number of Canadian troops to 500,000. Feb. 3, Destruction of the Houses of Parliament at Ottawa by fire. April 3-20, Battle of St. Eloi. June 1, Census of prairie provinces. June 1-3, Battle of Sanctuary Wood. Sept. 1, Cornerstone of new Houses of Parliament laid by Duke of Connaught. Sept., Issue of second war loan, \$100,000,000.
1917. Feb. 12-May 15, Imperial Conference. Feb. 21, Final Report of Dominions Royal Commission. March, Third war loan, \$150,000,000. March 20-May 2, Meetings in London of Imperial War Cabinet. March 21-April 27, Imperial War Conference. April 5, Declaration of war against Germany by United States. April 9, Capture of Vimy Ridge. June 21, Appointment of Food Controller. Aug. 15, Battle of Loos, capture of Hill 70. Aug. 29, Passing of Military Service Act. Sept. 20, Completion of Quebec bridge. Sept. 20, Parliamentary franchise extended to women. Oct. 26-Nov. 10, Battle of Passchendaele. Nov. 12, Fourth war loan (Victory Bonds). Dec. 6, Disastrous explosion at Halifax, N.S. Dec. 17, General election and Union Government sustained.
1918. Mar. 18, Opening of first session of 13th Parliament. Mar. 21, Germans launch critical offensive on west front. Mar.-April, Second battle of the Somme. April 17, Secret session of Parliament. June-July, Prime Minister and colleagues attend Imperial War Conference in London. July 18, Allies assume successful offensive on west front. Aug. 12, Battle of Amiens. Aug. 26-28, Capture of Monchy le Preux. Sept. 24, Breaking of Drocourt-Queant line. Sept. 16, Austrian peace note. Sept. 27-29, Capture of Bourlon Wood. Sept. 30, Bulgaria surrenders and signs armistice. Oct. 1-9, Capture of Cambrai. Oct., Serious influenza epidemic. Oct. 6, First German peace note. Oct. 20, Capture of Denain. Oct. 25-Nov. 2, Capture of Valenciennes. Oct. 28, Issue of fifth war loan for \$300,000,000 in the form of Victory Bonds. Oct. 31, Turkey surrenders and signs armistice. Nov. 4, Austria-Hungary surrenders and signs armistice. Nov. 10, Flight into Holland of German Emperor. Capture of Mons. Nov. 11, Germany surrenders and signs armistice.
1919. Feb. 17, Death of Sir Wilfrid Laurier. Feb. 20-July 7, Second session of 13th Parliament of Canada. Mar. 7, Appointment of government receiver of the Grand Trunk Pacific railway. May 1-June 15, Great strike at Winnipeg and other western cities. June 23, General election in Quebec, and retention of Liberal administration. June 28, Signing at Versailles of Peace Treaty and Protocol. July 24, General election in Prince Edward Island and defeat of Conservative administration. Aug. 15, Arrival of H. R. H. the Prince of Wales for official tour in Canada. Aug. 22, Formal opening of Quebec Bridge by H.R.H. the Prince of Wales. Sept. 1, H.R.H. the Prince of Wales lays foundation stone of tower of new Parliament Buildings at Ottawa. Sept. 1-Nov. 10, Third or special peace session of 13th Parliament of Canada. Oct. 20, General election in Ontario, and formation of ministry by E. C. Drury, United Farmers' Organization. Issue of sixth war loan for \$300,000,000 in the form of Victory Bonds. Dec. 20, Organ-

- ization of "Canadian National Railways" by Order in Council.
1920. Jan. 10, Ratifications of the Treaty of Versailles. Feb. 19, Shareholders ratify agreement for sale of the Grand Trunk railway to the Dominion Government. Feb. 26-July 1, Fourth session of the Thirteenth Parliament of Canada. May 31-June 18, Trade Conference at Ottawa between Dominion and West Indian Governments. June 29, Provincial general election in Manitoba; Liberal government retained in office. July 10, Sir Robert Borden is succeeded by Right Hon. Arthur Meighen as Premier. July 16, Ratifications of the Treaty of St. Germain-en-Laye. July 27, Provincial general election in Nova Scotia; Liberal government sustained. Aug. 9, Ratifications of the Treaty of Neuilly-sur-Seine. Oct. 9, Provincial general election in New Brunswick; Liberal government is sustained. Oct. 20, Prohibition defeated in British Columbia. Oct. 25, Referendum *re* complete prohibition of the liquor traffic is carried in Nova Scotia, Manitoba, Saskatchewan and Alberta. Nov. 15, First meeting of League of Nations Assembly begins at Geneva, Switzerland. Dec. 1, Provincial general election in British Columbia; Liberal government is sustained.
1921. Feb. 14-June 4, Fifth Session of Thirteenth Parliament of Canada. April 18, Ontario votes for prohibition of the manufacture, importation and sale of alcoholic liquors. May 1, Government control of liquor traffic becomes effective in Quebec. May 10, Preferential tariff arrangement with British West Indies becomes effective. June 20-August 5, Imperial Conference. June 9, At general election in Saskatchewan, Liberal government is sustained. July 18, At general election in Alberta, the United Farmers secure majority of seats. Sept. 5-Oct. 5, Second meeting of Assembly of League of Nations at Geneva. Nov. 11, Opening of conference on limitation of armament at Washington. Dec. 6, Dominion general election. Dec. 29, New ministry (Liberal), with Right Hon. W. L. Mackenzie King as premier, is sworn in.
1922. Feb. 1, Arms Conference at Washington approves 5-power treaty limiting capital fighting ships and pledging against unrestricted submarine warfare and use of poison gas. Feb. 10, Hon. P. C. Larkin appointed High Commissioner for Canada in the United Kingdom. Mar. 8-June 28, First session of Fourteenth Parliament of Canada. April 10, General Economic Conference opened at Genoa. July 13, Conference between Canada and the United States *re* perpetuating the Rush-Bagot Treaty regarding armament on the Great Lakes. Aug. 7, Allies' Conference on war debts and reparations opened at London. Sept. 4, Third assembly of League of Nations opened at Geneva. Oct. 4, Order in Council consolidating separate lines in Canadian National Railway system. Oct. 5, Serious forest fires in northern Ontario; town of Haileybury destroyed. Oct. 10, Mudania Armistice signed by Britain, France and Turkey. Oct. 14, Fourth International Labour Conference at Geneva. Nov. 20, Turkish Peace Conference opened at Lausanne. Dec. 4, Opening of First International Postal Conference at Ottawa, between representatives of the United States and Canada. Dec. 9, Reparations Conference opened at London. Dec. 15, Signing of trade agreement between Canada and France.
1923. Jan. 1, National Defence Act, 1922, comes into effect, amalgamating Militia, Naval and Air Force departments. Jan. 4, Signing of trade agreement between Canada and Italy. Jan. 31-June 30, Second session of Fourteenth Parliament of Canada. April 1, Removal of British embargo on Canadian cattle effective. June 22, Manitoba votes for government control of the sale of liquor in the province. June 25, Provincial elections in Ontario; Conservative party under Hon. G. Howard Ferguson returned to power. July 26, Provincial elections in Prince Edward Island; Conservative party under Hon. J. D. Stewart returned to power. Sept. 3, Fourth session of League of Nations at Geneva. Oct. 1, Imperial Conference and Imperial Economic Conference at London. Nov. 5, Alberta votes for government control of the liquor traffic.
1924. Feb. 28-July 19, Third session of the Fourteenth Parliament of Canada. April 23, British Empire Exhibition opened by King George at Wembley, England, with the Prince of Wales as President. June 20, Provincial general elections in British Columbia—Liberal government retained in office. July 3, Trade agreement between Canada and Belgium signed at Laurier House. July 16, Saskatchewan votes in favour of government control of the liquor traffic. Aug. 6-Aug. 13, Meetings of the British Association for the Advancement of Science at Toronto.

III.—CONSTITUTION AND GOVERNMENT.

The Dominion of Canada is the largest in area and the most populous of the great self-governing Dominions of the British Empire, which also include the Commonwealth of Australia, the Union of South Africa, the Dominion of New Zealand and the island colony of Newfoundland (with Labrador). These Dominions enjoy responsible government of the British type, administered by Executive Councils (or Cabinets), acting as advisors to the representative of the Sovereign, themselves responsible to and possessing the confidence of the representatives elected to Parliament by the people, and giving place to other persons more acceptable to Parliament whenever that confidence is shown to have ceased to exist.

Of these Dominions, Canada, Australia, and South Africa extend over enormous areas of territory, the first two approximating in area to Europe. Each section has its own problems and its own point of view, so that local parliaments for each section, as well as the central parliament for the whole country, are required. These local parliaments, established when transportation and communication were more difficult and expensive than at present, were chronologically prior to the central body, to which on its formation they either resigned certain powers, as in the case of Australia, or surrendered all their powers with certain specified exceptions, as in Canada and South Africa. Of such local parliaments, Canada at the present time has nine, Australia six, and South Africa four.

Besides the Dominions above enumerated, the Irish Free State (Saorstát Éireann) now possesses full Dominion status. The great Empire of India has internationally been accepted as a member of the League of Nations, and in its internal administration has been placed on the road, formerly traversed by the Dominions which are now fully self-governing, towards responsible government. Indeed, the whole evolution of the Empire, throughout all its parts which are more than mere fortresses like Gibraltar or trading stations like Hong Kong, is in the direction of responsible government, to be attained in the dependencies as it has been in what used to be called the colonies, by the gradual extension of self-government in proportion to the growing capacities of their respective populations. It is the recognized aim of British administrators, by the extension of educational facilities and by just administration, to develop these capacities to the utmost, so that in the dependencies, as well as in the Dominions and in the Mother Country, the constitutional history of the future may be a record of "freedom slowly broadening down from precedent to precedent."

I.—CONSTITUTION AND GENERAL GOVERNMENT OF CANADA.

Under the above heading a brief historical and descriptive account of the evolution of the general government of Canada was given on pages 89-100 of the Canada Year Book, 1922-23, to which the reader is referred.

II.—PROVINCIAL AND LOCAL GOVERNMENT IN CANADA.

Under the heading "Provincial and Local Government in Canada" a brief account of the government of each of the provinces of Canada and of its municipal institutions and judicial organization was published on pages 101-115 of the 1922-23 edition of the Year Book. Considerations of space prevent republication in this edition.

III.—PARLIAMENTARY REPRESENTATION IN CANADA.

1.—Dominion Parliament.

The Dominion Parliament is composed of the King, represented by the Governor-General, the Senate and the House of Commons. The Governor-General is appointed by the King in Council. Members of the Senate are appointed for life by the Governor-General in Council and members of the House of Commons are elected by the people. As a result of the working out of the democratic principle, the part played by the King's representative and the Upper Chamber of Parliament in the country's legislation has been, in Canada as in the Mother Country, a steadily decreasing one, the chief responsibilities involved in legislation being assumed by the House of Commons.

The Governor-General of Canada.

The Governor-General is appointed by the King as his representative in Canada, usually for a term of five years, with a salary fixed at £10,000 sterling per annum and forming a charge against the consolidated revenue of the country. The Governor-General is bound by the terms of his commission and can only exercise such authority as is expressly entrusted to him. He acts under the advice of his Ministry, which is responsible to Parliament, and, as the acting head of the executive, summons, prorogues and dissolves Parliament and assents to or reserves bills. In the discharge of these and other executive duties, he acts entirely by and with the advice of his Ministry (the Governor-General in Council). In matters of Imperial interest affecting Canada he consults with his ministers and submits their views to the British Government. The royal prerogative of mercy in capital cases, formerly exercised on the Governor-General's own judgment and responsibility, is now exercised pursuant to the advice of the Ministry.

A list of the Governors-General from the time of Confederation, with the dates of their appointment and assumption of office, is given in Table 1.

1.—Governors-General of Canada, 1867-1924.

Name.	Date of appointment.	Date of assumption of office.
Viscount Monck, G.C.M.G.....	June 1, 1867	July 1, 1867
Lord Lisgar, G.C.M.G.....	Dec. 29, 1868	Feb. 2, 1869
The Earl of Dufferin, K.P., K.C.B., G.C.M.G.....	May 22, 1872	June 25, 1872
The Marquis of Lorne, K.T., G.C.M.G.....	Oct. 5, 1878	Nov. 25, 1878
The Marquis of Lansdowne, G.C.M.G.....	Aug. 18, 1883	Oct. 23, 1883
Lord Stanley of Preston, G.C.B.....	May 1, 1888	June 11, 1888
The Earl of Aberdeen, K.T., G.C.M.G.....	May 22, 1893	Sept. 18, 1893
The Earl of Minto, G.C.M.G.....	July 30, 1898	Nov. 12, 1898
The Earl Grey, G.C.M.G.....	Sept. 26, 1904	Dec. 10, 1904
Field-Marshal H.R.H. the Duke of Connaught, K.G.....	Mar. 21, 1911	Oct. 13, 1911
The Duke of Devonshire, K.G., G.C.M.G., G.C.V.O.....	Aug. 19, 1916	Nov. 11, 1916
General the Lord Bingham of Vimy, G.C.B., G.C.M.G., M.V.O.....	Aug. 2, 1921	Aug. 11, 1921

The Ministry.

A system of government based upon the British, by which a Cabinet or Ministry (composed of members of the House of Commons or the Senate), responsible to Parliament, holds office while it enjoys the confidence of the people's representatives, is found in Canada. The Cabinet is actually a committee of the King's Privy Council for Canada. Without enlarging upon the features of the system, it may be sufficient to note that the Cabinet is responsible to the House of Commons, and,

following established precedent, resigns office when it becomes evident that it no longer holds the confidence of the people's representatives. Members of the Cabinet are chosen by the Prime Minister; each of them generally assumes charge of one of the various departments of the government, although one Minister may hold two portfolios at the same time, while other members may be without portfolio. The present Ministry consists of 20 members. Three of them are without portfolio, while three others, including the Prime Minister, are in charge of two or more departments.

The Prime Ministers since Confederation, and their dates of office, together with the members of the present Ministry are given in Table 2.

2.—Ministries since Confederation.

1. Rt. Hon. Sir John A. Macdonald, Premier. From July 1, 1867 to Nov. 6, 1873.
2. Hon. Alexander Mackenzie, Premier. From Nov. 7, 1873 to Oct. 16, 1878.
3. Rt. Hon. Sir John A. Macdonald, Premier. From Oct. 17, 1878 to June 6, 1891.
4. Hon. Sir John J. C. Abbott, Premier. From June 16, 1891 to Dec. 5, 1892.
5. Hon. Sir John S. D. Thompson, Premier. From Dec. 5, 1892 to Dec. 12, 1894.
6. Hon. Sir Mackenzie Bowell, Premier. From Dec. 21, 1894 to April 27, 1896.
7. Hon. Sir Charles Tupper, Premier. From May 1, 1896 to July 8, 1896.
8. Rt. Hon. Sir Wilfrid Laurier, Premier. From July 11, 1896 to Oct. 6, 1911.
9. Rt. Hon. Sir Robert L. Borden, Premier. (Conservative Administration). From Oct. 10, 1911 to Oct. 12, 1917.
10. Rt. Hon. Sir Robert L. Borden, Premier. (Unionist Administration). From Oct. 12, 1917 to July 10, 1920.
11. Rt. Hon. Arthur Meighen, Premier. (Unionist—"National Liberal and Conservative Party.") From July 10, 1920 to Dec. 29, 1921.
12. Rt. Hon. William Lyon Mackenzie King, Premier. From Dec. 29, 1921.

NOTE.—A complete list of the members of Dominion Ministries from Confederation to 1913 appeared in the Year Book of 1912, pp. 422-429. A list of the members of the Dominion Ministries from 1911 to 1921 appeared in the Year Book of 1920, pp. 651-653.

TWELFTH DOMINION MINISTRY.

(According to precedence of the Ministers as at the formation of the Cabinet).

Office.	Occupant.	Date of Appointment.
Prime Minister, Secretary of State for External Affairs, President of the Privy Council.....	Right Hon. William Lyon Mackenzie King	Dec. 29, 1921
Minister of Finance.....	Right Hon. William S. Fielding.....	Dec. 29, 1921
Minister of National Defence.....	Hon. George P. Graham.....	Dec. 29, 1921
	Hon. Edward Macdonald ¹	April 28, 1923
	Hon. Edward Macdonald.....	Aug. 17, 1923
Postmaster General.....	Hon. Chas. Murphy.....	Dec. 29, 1921
Minister without Portfolio.....	Hon. Raoul Dandurand.....	Dec. 29, 1921
Minister of Soldiers' Civil Re-Establishment and the Minister in charge of and to administer the Department of Health.		
Minister of Public Works.....	Hon. Henri S. Béland.....	Dec. 29, 1921
	Hon. Hewitt Bostock.....	Dec. 29, 1921
	Hon. James H. King.....	Feb. 3, 1922
Minister of Justice and Attorney General...	Hon. Sir Lomer Gouin.....	Dec. 29, 1921
	Hon. Ernest Lapointe.....	Jan. 30, 1924
Minister of Customs and Excise.....	Hon. Jacques Bureau.....	Dec. 29, 1921
Minister of Marine and Fisheries.....	Hon. Ernest Lapointe.....	Dec. 29, 1921
	Hon. P. J. A. Cardin.....	Jan. 30, 1924
Solicitor General.....	Hon. Daniel D. McKenzie.....	Dec. 29, 1921
	Hon. E. J. McMurray.....	Sept. 12, 1923
Minister of Immigration and Colonization..	Hon. James A. Robb.....	Aug. 17, 1923
Minister of Trade and Commerce.....	Hon. James A. Robb.....	Dec. 29, 1921
	Hon. Thomas A. Low.....	Aug. 17, 1923
Minister without Portfolio.....	Hon. Thomas A. Low.....	Dec. 29, 1921
Secretary of State.....	Hon. Arthur B. Copp.....	Dec. 29, 1921
Minister of Railways and Canals.....	Hon. William C. Kennedy.....	Dec. 29, 1921
	Hon. George P. Graham.....	April 28, 1923
Minister of the Interior, Superintendent General of Indian Affairs and Minister of Mines.....		
Minister of Agriculture.....	Hon. Charles Stewart.....	Dec. 29, 1921
Minister of Labour.....	Hon. William R. Motherwell.....	Dec. 29, 1921
Minister without portfolio.....	Hon. James Murdock.....	Dec. 29, 1921
Minister without portfolio.....	Hon. John E. Sinclair.....	Dec. 29, 1921
Minister without portfolio.....	Hon. H. B. McGiverin.....	Sept. 20, 1924

¹ Acting Minister.

In Table 3 are given the dates of the opening and prorogation of the sessions of the various Dominion Parliaments from 1867 to 1924.

3.—Duration and Sessions of Dominion Parliaments, 1867-1924.

Number of Parliament.	Ses- sion.	Date of Opening.	Date of Prorogation.	Days of ses- sion.	Elections, writs returnable, dissolutions ⁵ and lengths of Parliaments. ¹⁰
1st Parliament.....	1st	Nov. 1, 1867	May 22, 1868	118 ¹	Aug., Sept., 1867. ³ Sept. 24, 1867. ⁴ July 8, 1872. ⁵ 4 y., 9 m., 15 d. ⁶ July, Aug., Sept., '72. ³ Sept. 3, 1872. ⁴ Jan. 2, 1874. ⁵ 1 y., 4 m., 0 d. ⁶ Jan. 22, 1874. ³ Feb. 21, 1874. ⁴ Aug. 17, 1874. ⁵ 4 y., 5 m., 25 d. ⁶
	2nd	April 15, 1869	June 22, 1869	69	
	3rd	Feb. 15, 1870	May 12, 1870	87	
	4th	Feb. 15, 1871	April 14, 1871	59	
	5th	April 11, 1872	June 14, 1872	65	
2nd Parliament.....	1st	Mar. 5, 1873	Aug. 13, 1873	112	Jan. 2, 1874. ⁵ 1 y., 4 m., 0 d. ⁶ Jan. 22, 1874. ³ Feb. 21, 1874. ⁴ Aug. 17, 1874. ⁵ 4 y., 5 m., 25 d. ⁶
	2nd	Oct. 23, 1873	Nov. 7, 1873	16	
3rd Parliament.....	1st	Mar. 26, 1874	May 26, 1874	62	Sept. 17, 1878. ³ Nov. 21, 1878. ⁴ May 18, 1882. ⁵ 3 y., 5 m., 28 d. ⁶ June 20, 1882. ³ Aug. 7, 1882. ⁴ Jan. 15, 1887. ⁵ 4 y., 5 m., 10 d. ⁶ Feb. 22, 1887. ³ April 7, 1887. ⁴ Feb. 3, 1891. ⁵ 3 y., 9 m., 27 d. ⁶
	2nd	Feb. 4, 1875	April 8, 1875	64	
	3rd	Feb. 10, 1876	April 12, 1876	63	
	4th	Feb. 8, 1877	April 28, 1877	80	
	5th	Feb. 7, 1878	May 10, 1878	93	
4th Parliament.....	1st	Feb. 13, 1879	May 15, 1879	92	March 5, 1891. ³ April 25, 1891. ⁴ April 24, 1893. ⁵ 5 y., 0 m., 0 d. ⁶
	2nd	Feb. 12, 1880	May 7, 1880	86	
	3rd	Dec. 9, 1880	Mar. 21, 1881	103	
	4th	Feb. 9, 1882	May 17, 1882	98	
5th Parliament.....	1st	Feb. 8, 1883	May 25, 1883	107	June 23, 1896. ³ July 13, 1896. ⁴ Oct. 9, 1900. ⁵ 4 y., 2 m., 26 d. ⁶ Nov. 7, 1900. ³ Dec. 5, 1900. ⁴ Sept. 29, 1904. ⁵ 3 y., 9 m., 26 d. ⁶ Nov. 3, 1904. ³ Dec. 15, 1904. ⁴ Sept. 17, 1908. ⁵ 3 y., 9 m., 4 d. ⁶ Oct. 26, 1908. ³ Dec. 3, 1908. ⁴ July 29, 1911. ⁵ 2 y., 7 m., 28 d.
	2nd	Jan. 17, 1884	April 19, 1884	94	
	3rd	Jan. 29, 1885	July 20, 1885	173	
	4th	Feb. 25, 1886	June 2, 1886	98	
6th Parliament.....	1st	April 13, 1887	June 23, 1887	72	Sept. 21, 1911. ³ Oct. 7, 1911. ⁴ Oct. 6, 1917. ⁵ 6 y., 0 m., 0 d. ⁶
	2nd	Feb. 23, 1888	May 22, 1888	90	
	3rd	Jan. 31, 1889	May 2, 1889	92	
	4th	Jan. 16, 1890	May 16, 1890	121	
7th Parliament.....	1st	April 29, 1891	Sept. 30, 1891	155	Dec. 17, 1917. ³ Feb. 27, 1918. ⁴ Oct. 4, 1921. ⁵ 3 y., 7 m., 6 d. ⁶ Dec. 6, 1921. ³ Jan. 14, 1922. ⁴
	2nd	Feb. 25, 1892	July 9, 1892	136	
	3rd	Jan. 26, 1893	April 1, 1893	66	
	4th	Mar. 15, 1894	July 23, 1894	131	
	5th	April 18, 1895	July 22, 1895	96	
	6th	Jan. 2, 1896	April 23, 1896	111	
8th Parliament.....	1st	Aug. 19, 1896	Oct. 5, 1896	48	Dec. 17, 1917. ³ Feb. 27, 1918. ⁴ Oct. 4, 1921. ⁵ 3 y., 7 m., 6 d. ⁶ Dec. 6, 1921. ³ Jan. 14, 1922. ⁴
	2nd	Mar. 25, 1897	June 29, 1897	97	
	3rd	Feb. 3, 1898	June 13, 1898	131	
	4th	Mar. 16, 1899	Aug. 11, 1899	149	
	5th	Feb. 1, 1900	July 18, 1900	168	
9th Parliament.....	1st	Feb. 6, 1901	May 23, 1901	107	Dec. 17, 1917. ³ Feb. 27, 1918. ⁴ Oct. 4, 1921. ⁵ 3 y., 7 m., 6 d. ⁶ Dec. 6, 1921. ³ Jan. 14, 1922. ⁴
	2nd	Feb. 13, 1902	May 15, 1902	90	
	3rd	Mar. 12, 1903	Oct. 24, 1903	227	
	4th	Mar. 10, 1904	Aug. 10, 1904	154	
10th Parliament.....	1st	Jan. 11, 1905	July 20, 1905	191	Dec. 17, 1917. ³ Feb. 27, 1918. ⁴ Oct. 4, 1921. ⁵ 3 y., 7 m., 6 d. ⁶ Dec. 6, 1921. ³ Jan. 14, 1922. ⁴
	2nd	Mar. 8, 1906	July 13, 1906	128	
	3rd	Nov. 22, 1906	April 27, 1907	157	
	4th	Nov. 28, 1907	July 20, 1908	236	
11th Parliament.....	1st	Jan. 20, 1909	May 19, 1909	120	Dec. 17, 1917. ³ Feb. 27, 1918. ⁴ Oct. 4, 1921. ⁵ 3 y., 7 m., 6 d. ⁶ Dec. 6, 1921. ³ Jan. 14, 1922. ⁴
	2nd	Nov. 11, 1909	May 4, 1910	175	
	3rd	Nov. 17, 1910	July 29, 1911	196 ⁷	
	1st	Nov. 15, 1911	April 1, 1912	139	
	2nd	Nov. 21, 1912	June 6, 1913	173 ⁸	
12th Parliament.....	3rd	Jan. 15, 1914	June 12, 1914	148	Dec. 17, 1917. ³ Feb. 27, 1918. ⁴ Oct. 4, 1921. ⁵ 3 y., 7 m., 6 d. ⁶ Dec. 6, 1921. ³ Jan. 14, 1922. ⁴
	4th	Aug. 18, 1914	Aug. 22, 1914	5	
	5th	Feb. 4, 1915	April 15, 1915	71	
	6th	Jan. 12, 1916	May 18, 1916	127	
	7th	Jan. 18, 1917	Sept. 20, 1917	207 ⁹	
	1st	Mar. 18, 1918	May 24, 1918	68	
13th Parliament.....	2nd	Feb. 20, 1919	July 7, 1919	138	Dec. 17, 1917. ³ Feb. 27, 1918. ⁴ Oct. 4, 1921. ⁵ 3 y., 7 m., 6 d. ⁶ Dec. 6, 1921. ³ Jan. 14, 1922. ⁴
	3rd	Sept. 1, 1919	Nov. 10, 1919	71	
	4th	Feb. 26, 1920	July 1, 1920	127	
	5th	Feb. 14, 1921	June 4, 1921	111	
14th Parliament.....	1st	Mar. 8, 1922	June 28, 1922	113	Dec. 17, 1917. ³ Feb. 27, 1918. ⁴ Oct. 4, 1921. ⁵ 3 y., 7 m., 6 d. ⁶ Dec. 6, 1921. ³ Jan. 14, 1922. ⁴
	2nd	Jan. 31, 1923	June 30, 1923	151	
	3rd	Feb. 28, 1924	July 19, 1924	143	

¹ Adjourned from 21st December, 1867, to 12th March, 1868, to allow the local Legislatures to meet.
² Adjourned 23rd May till 13th August. ³ Period of general elections. ⁴ Writs returnable. ⁵ Dissolution of Parliament. ⁶ Duration of Parliament in years, months and days. The life of a Parliament is counted from the date of return of election writs to the date of dissolution, both days inclusive. ⁷ Not including days (59) of adjournment from May 19th to July 18th. ⁸ Not including days (25) of adjournment from Dec. 19th, 1912, to Jan. 14th, 1913. ⁹ Not including days (39) of adjournment from Feb. 7th to April 19th, 1917.
¹⁰ The ordinary legal limit of duration for each parliament is five years.

A brief *résumé* of the history of parliamentary representation follows. Attention may be drawn to the growth in the number of members of both the Senate and the House of Commons since Confederation and to the greatly increased unit of representation in the lower house.

The Senate.

The British North America Act, 1867, provides in sections 21 and 22 that "the Senate shall consist of seventy-two members, who shall be styled Senators. In relation to the constitution of the Senate, Canada shall be deemed to consist of three divisions,—(1) Ontario; (2) Quebec; (3) The Maritime Provinces, Nova Scotia and New Brunswick; which three divisions shall be equally represented in the Senate as follows,—Ontario by twenty-four Senators; Quebec by twenty-four Senators; and the Maritime Provinces by twenty-four Senators, twelve thereof representing New Brunswick and twelve thereof representing Nova Scotia. In the case of Quebec, each of the twenty-four Senators representing the province shall be appointed for one of the electoral divisions of Lower Canada specified in schedule A to Chapter I of the Consolidated Statutes of Canada." Further, under section 147 of the same Act, it is provided that, "in case of the admission to Confederation of Newfoundland or Prince Edward Island, . . . each shall be entitled to a representation in the Senate of four members." "Prince Edward Island when admitted shall be deemed to be comprised in the third of the three divisions into which Canada is divided by this Act" and on its admission "the representation of Nova Scotia and New Brunswick shall, as vacancies occur be reduced from twelve to ten members respectively." In case of the admission of Newfoundland, the normal membership of the Senate of 72 members was to be increased to 76, while the maximum number (78, sec. 28) was set at 82. Sec. 26 contains a provision for the appointment of three or six additional members in certain cases to represent equally the three divisions of Canada.

By 33 Vict., c. 3, an Act to establish and provide for the government of the province of Manitoba, passed in 1870, the newly formed province was given representation in the Senate of two members, provision being made at the same time for increases in representation to three and four on increases of population, according to the decennial census, to 50,000 and 75,000 respectively. In the following year, British Columbia, on being admitted to the Union by an Imperial Order in Council of May 16, 1871, was given representation by three Senators. Two years later, when Prince Edward Island was admitted to Confederation by an Imperial Order in Council of June 26, 1873, it was granted representation in the Senate of four members under the terms of the British North America Act, as cited above. Thus, in 1873, the seven provinces of Ontario, Quebec, Nova Scotia, New Brunswick, Manitoba, British Columbia and Prince Edward Island were represented by a total of 77 members in the Senate, their individual representation at the time being in order 24, 24, 10, 10, 2, 3 and 4 members respectively.

In 1882, following the 1881 census and an increase of population in Manitoba to 62,260 persons, the representation of this province was increased to three members under authority of the Manitoba Act, 1870. Later, by 50-51 Vict., c. 38, an Act of 1887, the representation of the Northwest Territories in the Senate was fixed at two members. A subsequent increase resulted from the growth of population in Manitoba to 152,506, as shown by the census of 1891, the province being granted a fourth senator under the terms of the Manitoba Act of 1870. An Act passed in the session of 1903, 3 Edw. VII, c. 42, provided for an increase in the representation

of the Northwest Territories from two to four members, bringing the total representation at this date to 83 members.

On the establishment of the provinces of Alberta and Saskatchewan in 1905, under 4-5 Edw. VII, cc. 3 and 42, provision was made for their representation in the Senate by four members each, which might be increased by Parliament to 6 on the completion of the next decennial census. This change in representation brought the membership of the Upper Chamber to a total of 87.

In 1915, by an amendment to the British North America Act, 5-6 Geo. V, c. 45, an important change was made with regard to the constitution of the Senate. The number of divisions provided for by section 22 of the original Act was increased from three to four, the fourth comprising the four western provinces of Manitoba, Saskatchewan, Alberta and British Columbia. Each of these provinces was to be represented by 6 members under the Act, the division being thus represented by 24 members and placed on an equality with the others with respect to membership. A corresponding change was made in the number of additional senators provided for by the original British North America Act, by substituting increases of four or eight members for the three or six cited in section 26 of the Act of 1867. Normal representation, therefore, is at present fixed at 96, which number may be increased if necessary to 100 or to a maximum of 104.

The entry of Newfoundland to the Union is still provided for by the above Act, sub-section 6 of sec. 1 of which sets out its representation as six members instead of the four granted by the Act of 1867. Should Newfoundland be admitted to the Dominion, the normal number of senators is to be 102 with a maximum of 110.

In Table 4 the growth of membership in the Senate is shown by divisions and provinces from 1867 to 1915, since when no increase has taken place.

4.—Growth of Representation in the Senate, 1867-1915.

Provinces.	1867.	1870.	1871.	1873.	1882.	1887.	1892.	1903.	1905.	1915.
(1) Ontario.....	24	24	24	24	24	24	24	24	24	24
(2) Quebec.....	24	24	24	24	24	24	24	24	24	24
(3) Maritime Provinces.....	24	24	24	24	24	24	24	24	24	24
Nova Scotia.....	12	12	12	10	10	10	10	10	10	10
New Brunswick.....	12	12	12	10	10	10	10	10	10	10
Prince Edward Island.....	—	—	—	4	4	4	4	4	4	4
(4) Western Provinces.....	—	2	5	5	6	8	9	11	15	24
Manitoba.....	—	2	2	2	3	3	4	4	4	6
British Columbia.....	—	—	3	3	3	3	3	3	3	6
Saskatchewan.....	—	—	—	—	—	2	2	4	4	6
Alberta.....	—	—	—	—	—				4	6
Total.....	72	74	77	77	78	80	81	83	87	96

5.—Representation in the Senate of Canada, by Provinces, as at June 30, 1924.

Names of Senators.	Post Office Address.	Names of Senators.	Post Office Address.
Prince Edward Island (4 senators) —		Ontario (24 senators) —	
Yeo, John.....	Port Hill.	McHugh, Geo.....	Lindsay.
Frowse, Benj. C.....	Charlottetown	Belcourt, N. A., P.C.....	Ottawa.
Murphy, Patrick C.....	Tignish.	Gordon, Geo.....	North Bay.
McLean, John.....	Souris.	Smith, E. D.....	Winona.
		McCall, Alexander.....	Simcoe.
		Donnelly, J. J.....	Pinkerton.
		Lynch-Staunton, G.....	Hamilton.
		Robertson, G. D., P.C.....	Welland.
		Blain, Richard.....	Brampton.
		Fisher, J. H.....	Paris.
		Bennett, W. H.....	Midland.
		Webster, John.....	Brookville.
		Mulholland, R. A.....	Port Hope.
		O'Brien, M. J.....	Renfrew.
		White, G. V.....	Pembroke.
		Reid, J. D., P.C.....	Prescott.
		Foster, Sir G. E., P.C.....	Ottawa.
		Kemp, Sir A. E., P.C.....	Toronto.
		Macdonell, A. H.....	Toronto.
		McCoig, A. B.....	Chatham.
		Hardy, A. C.....	Brookville.
		Pardee, F. F.....	Sarnia.
		Aylesworth, Sir A. B., P.C.....	Toronto.
		Haydon, Andrew.....	Ottawa.
		Manitoba (6 senators) —	
		Watson, Robt.....	Portage la Prairie.
		Sharpe, W. H.....	Manitou.
		McMeans, L.....	Winnipeg.
		Bénard, Aimé.....	Winnipeg.
		Schaffner, F. L.....	Winnipeg.
		Bradbury, G. H.....	Selkirk.
		Saskatchewan (6 senators) —	
		Ross, James H.....	Regina.
		Laird, H. W.....	Regina.
		Widloughby, W. B.....	Moose Jaw.
		Turriff, J. G.....	Carlyle.
		Calder, J. A., P.C.....	Regina.
		Gillis, A. B.....	Whitewood.
		Alberta (6 senators) —	
		Lougheed, Sir J. A., P.C.....	Calgary.
		De Veber, L. George.....	Lethbridge.
		Michener, Edward.....	Red Deer.
		Harmer, Wm. J.....	Edmonton.
		Griesbach, W. A.....	Edmonton.
		Côté, Jean Léon ²	Edmonton.
		British Columbia (6 senators) —	
		Bostock, Hewitt, P.C.....	Monte Creek.
		Planta, A. E.....	Nanaimo.
		Barnard, G. H.....	Victoria.
		Taylor, J. D.....	New Westminster.
		Green, R. F.....	Victoria.
		Crowe, S. J.....	Vancouver.
Nova Scotia (10 senators) —			
Farrell, Edward M.....	Liverpool.		
Roche, William.....	Halifax.		
Curry, Nathaniel.....	Amherst.		
Ross, Wm. B.....	Middleton.		
Girroir, E. L.....	Antigonish.		
McLennan, John S.....	Sydney.		
Tanner, C. E.....	Pictou.		
Stanfield, John.....	Truro.		
McCormick, John.....	Sydney Mines.		
Martin, Peter.....	Halifax.		
New Brunswick (10 senators) —			
Poirier, Pascal.....	Shediac.		
King, G. G.....	Chipman.		
Daniel, J. W.....	St. John.		
Bourque, T. J.....	Richibucto.		
Todd, Irving R.....	Milltown.		
McDonald, J. A.....	Shediac.		
Black, Frank B.....	Sackville.		
Turgeon, Onésiphore.....	Bathurst.		
Robinson, C. W.....	Moncton.		
Quebec (24 senators) —			
Bolduc, Joseph, P.C. ¹	St. Victor de Tring.		
Montplaisir, H.....	Three Rivers.		
Thibaudeau, A. A.....	Montreal.		
Dandurand, R., P.C.....	Montreal.		
Casgrain, J. P. B.....	Montreal.		
Béique, F. L.....	Montreal.		
Legris, J. H.....	Louiseville.		
Tessier, Jules.....	Quebec.		
David, L. O.....	Montreal.		
Cloran, J. H.....	Montreal.		
Mitchell, Wm.....	Drummondville.		
Dessaulles, G. C.....	St. Hyacinthe.		
Lavergne, Louis.....	Arthabaska.		
Wilson, J. M.....	Montreal.		
Pope, Rufus H.....	Cookshire.		
Beaubien, C. P.....	Montreal.		
L'Espérance, D. O.....	Quebec.		
Foster, G. G.....	Montreal.		
White, R. S.....	Montreal.		
Blondin, P. E., P.C.....	Grand'Mère.		
Chapais, Thomas.....	Quebec.		
Webster, L. C.....	Montreal.		
Boyer, Gustave.....	Rigaud.		

¹Died Aug. 14, 1924.²Died Sept. 23, 1924.

The House of Commons.

Under section 37 of the original British North America Act of 1867 (30 Vict, c. 3), it was provided that "The House of Commons shall . . . consist of One hundred and eighty-one members, of whom eighty-two shall be elected for Ontario, sixty-five for Quebec, nineteen for Nova Scotia, and fifteen for New Brunswick." Further, under section 51, it was enacted that after the completion of the census of 1871 and of each subsequent decennial census, the representation of the four

provinces should be readjusted by such authority, in such manner, and from such time as the Parliament of Canada provided, subject to and according to the following rules:—

- (1) Quebec shall have the fixed number of Sixty-five Members;
- (2) There shall be assigned to each of the other provinces such a Number of Members as will bear the same Proportion to the Number of its Population (ascertained at such Census) as the Number Sixty-five bears to the Number of the Population of Quebec (so ascertained);
- (3) In the Computation of the Number of Members for a Province a fractional Part not exceeding One Half of the whole Number requisite for entitling the Province to a Member shall be disregarded; but a fractional Part exceeding One Half of that Number shall be equivalent to the whole Number;
- (4) On any such Re-adjustment the Number of Members for a Province shall not be reduced unless the Proportion which the Number of the Population of the Province bore to the Number of the aggregate Population of Canada at the then last preceding Re-adjustment of the Number of Members for the Province is ascertained at the then latest Census to be diminished by One Twentieth Part or upwards;
- (5) Such Re-adjustment shall not take effect until the Termination of the then existing Parliament.

Again, in section 52, it was enacted that “the number of members of the House of Commons may be from time to time increased by the Parliament of Canada, provided the proportionate representation of the Provinces prescribed by this Act is not thereby disturbed.”

Later on, by the British North America Act of 1886 (49-50 Vict., c. 35), provision was made in section 1 that “the Parliament of Canada may from time to time make provision for the representation in the Senate and House of Commons of Canada, or in either of them, of any territories which for the time being form part of the Dominion of Canada, but are not included in any province thereof.”

Again, in 1915 an amendment to the British North America Act (5-6 Geo. V, c. 45), was passed by the Imperial Parliament, providing that “notwithstanding anything in the said Act, a province shall always be entitled to a number of members in the House of Commons not less than the number of senators representing such province.”

Readjustments in Representation.—As set out in the above-mentioned provisions of the British North America Act, the first Dominion Parliament of 1867 consisted at its commencement of 181 members, 82 for Ontario, 65 for Quebec, 19 for Nova Scotia, and 15 for New Brunswick. To this number were added, under the Manitoba Act of 1870 (33 Vict., c. 3), 4 members to represent the newly-created province of Manitoba; also, according to the agreement under which British Columbia entered Confederation, ratified by Imperial Order in Council of May 16, 1871, 6 members were added to represent the new province, making a total of 191 members at the end of the first Parliament of Canada.

Arising out of the first census of the Dominion in 1871, a readjustment of representation took place in 1872 (c. 15 of 1872), increasing the representation of Ontario from 82 to 88, of Nova Scotia from 19 to 21, and of New Brunswick from 15 to 16 members, the nine additional members bringing the total number of representatives up to 200. To these were added in 1874, as a result of the agreement

under which Prince Edward Island entered Confederation (ratified by Imperial Order in Council of June 26, 1873), six members representing that province—bringing the membership of the House of Commons to 206.

The results of the second census of 1881 necessitated the passage of a new Representation Act (45 Vict., c. 3), increasing the representation of Ontario from 88 to 92 and that of Manitoba from 4 to 5, thus bringing the membership of the House of Commons to 211 members. To these were added, under the provisions of 49 Vict., c. 24, passed in 1886, 4 members for the Northwest Territories (2 for the then provisional district of Assiniboia, and 1 each for the then provisional districts of Alberta and Saskatchewan), bringing the total membership to 215.

The third census of 1891 was followed by another readjustment of representation, reducing the representation of Nova Scotia from 21 to 20, of New Brunswick from 16 to 14, of Prince Edward Island from 6 to 5, and increasing the representation of Manitoba from 5 to 7, the representation of the other provinces remaining as before. The net result was a reduction in the number of members of the House from 215 to 213.

The fourth census of 1901 resulted in a readjustment in 1903, reducing the representation of Ontario from 92 to 86, of Nova Scotia from 20 to 18, of New Brunswick from 14 to 13, of Prince Edward Island from 5 to 4. On the other hand, the representation of Manitoba was increased from 7 to 10, of British Columbia from 6 to 7, of the Northwest Territories from 4 to 10. By chapter 37 of the statutes of 1902, a member had been added for Yukon Territory, so that the net effect of the changes was to keep the membership at 214 in the early years of the present century. The extremely rapid growth of the Northwest Territories, however, led to their division and admission to Confederation in 1905 as the provinces of Alberta and Saskatchewan. In the Acts admitting them—the Alberta Act (4-5 Edw. VII, c. 3) and the Saskatchewan Act (4-5 Edw. VII, c. 42)—it was provided that their representation should be readjusted on the basis of the results of the quinquennial census of 1906. The Representation Act of 1907, implementing this pledge, increased the representation of Saskatchewan from 6 to 10, and of Alberta from 4 to 7 members, thus raising the total membership of the House of Commons to 221.

The census of 1911, with its very large but very unevenly distributed increase of population, led to considerable changes in representation, enacted by the Representation Act of 1914. The representation of Ontario was reduced from 86 to 82, of Nova Scotia from 18 to 16, of New Brunswick from 13 to 11, of Prince Edward Island from 4 to 3. On the other hand, the representation of Manitoba was raised from 10 to 15, of Saskatchewan from 10 to 16, of Alberta from 7 to 12 and of British Columbia from 7 to 13. The net result was an increase of 13 members in the total membership of the House of Commons, bringing the membership to 234. However, in the following session the amendment to the British North America Act, already referred to, resulted in the retention by Prince Edward Island of her fourth member (since she had four senators): (See also 5 Geo. V, c. 19). The total membership, therefore, of the House of Commons in the thirteenth and fourteenth Parliaments (elected in 1917 and 1921 respectively) was 235.

The Unit of Representation.—While the number of members of the House of Commons has been growing fairly steadily since Confederation, the unit of representation—one sixty-fifth of the population of Quebec within its 1911 boundaries—has also been increased after each census in consequence of the expanding

population of Quebec. The units of representation, as determined by the decennial censuses taken since Confederation, are as follows:—1871, 18,331 persons; 1881, 20,908; 1891, 22,901; 1901, 25,368; 1911, 30,819; 1921, 36,283.

6.—Representation in the House of Commons as at Dominion General Elections, 1867-1921.

Provinces.	1867.	1872.	1874.	1878.	1882.	1887.	1891.	1896.	1900.	1904.	1908.	1911.	1917.	1921.
Ontario.....	82	88	88	88	92	92	92	92	92	86	86	86	82	82
Quebec.....	65	65	65	65	65	65	65	65	65	65	65	65	65	65
Nova Scotia.....	19	21	21	21	21	21	21	20	20	18	18	18	16	16
New Brunswick.....	15	16	16	16	16	16	16	14	14	13	13	13	11	11
Manitoba.....	—	4	4	4	5	5	5	7	7	10	10	10	15	15
British Columbia.....	—	6	6	6	6	6	6	6	6	7	7	7	13	13
Prince Edward Island.....	—	—	6	6	6	6	6	5	5	4	4	4	4	4
Saskatchewan.....	—	—	—	—	—	—	—	4	4	10	10	10	16	16
Alberta.....	—	—	—	—	—	—	—	—	—	1	7	7	12	12
Yukon.....	—	—	—	—	—	—	—	—	—	1	1	1	1	1
Total.....	181	200	206	206	211	215	215	213	213	214	221	221	235	235

The electoral districts for the House of Commons of Canada, with their populations by the census of 1921, number of qualified voters and numbers voting in 1921, together with the names and addresses of members, as at Nov. 30, 1924, are shown in Table 7.

7.—Representation in the House of Commons, according to the Districts of the Representation Act, 1914, as at Nov. 30, 1924.

Provinces and Districts.	Population, 1921.	Voters on list.	Number of votes polled. ¹	Name of Member.	P.O. Address.
Prince Edward Island (4 members)—					
King's.....	20,445	11,189	8,728	Hughes, J. J.	Souris, P.E.I.
Prince.....	31,520	16,172	13,332	MacLean, A. E.	Summerside, P.E.I.
Queen's.....	36,650	19,518 ²	30,496 ²	(Sinclair, Hon. J. E. Mackinnon, D. A.	Emerald, P.E.I. Charlottetown, P.E.I.
Nova Scotia (16 members)					
Antigonish and Guys- borough.....	27,098	15,104	11,748	McIsaac, C. F.	Antigonish, N.S.
Cape Breton North and Victoria.....	31,325	16,652	11,588 ³	Kelly, F. L. ⁴	North Sydney, N.S.
Cape Breton South and Richmond.....	76,362	37,635 ²	51,555 ²	(Carroll, W. F.	Sydney, N.S.
Colchester.....	25,196	15,458	11,483	Kyte, Geo. W.	St. Peter's, N.S.
Cumberland.....	41,191	24,033	17,346	Putnam, H.	Truro, N.S.
Digby and Annapolis....	28,965	16,368	12,596	Logan, H. J.	Amherst, N.S.
Halifax.....	97,228	53,839 ²	60,639 ²	Lovett, L. J.	Bear River, N.S.
				(Finn, R. E. ⁴	Halifax, N.S.
				Black, W. A.	Halifax, N.S.
Hants.....	19,739	11,781	8,843	Martell, L. H.	Windsor, N.S.
Inverness.....	23,808	12,712	8,825	Chisholm, A. W.	Margaree Harbour, N.S.
King's.....	23,723	14,359	10,948	Robinson, E. W.	Wolfville, N.S.
Lunenburg.....	33,742	18,591	12,495	Duff, Wm.	Lunenburg, N.S.
Pictou.....	40,851	27,680	20,014	Macdonald, Hon. E. M.	Pictou, N.S.
Shelburne and Queen's..	23,435	13,155 ³	9,877 ³	Fielding, Rt. Hon. W. S. ⁴	Ottawa, Ont.
Yarmouth and Clare....	31,174	17,106	12,903	Hatfield, P. La C.	Yarmouth, N.S.

¹ From Report of Chief Electoral Officer, 1921.

² Each voter could vote for two candidates.

³ Votes and voters from returns of general elections, 1921.

⁴ Mr. Finn was elected on Dec. 4, 1922, Mr. Kelly on July 31, 1923, Rt. Hon. Mr. Fielding on Jan. 19, 1922.

7.—Representation in the House of Commons, according to the Districts of the Representation Act, 1914, as at Nov. 30, 1924—continued.

Provinces and Districts.	Population, 1921.	Voters on list.	Number of votes polled. ¹	Name of Member.	P.O. Address.
New Brunswick (11 members)—					
Charlotte.....	21,435	13,066	10,304	Grimmer, R. W.....	St. Stephen, N.B.
Gloucester.....	38,684	16,565	10,632 ²	Robichaud, J. G. ⁴	Shippigan, N.B.
Kent.....	23,916	10,847	7,755 ²	Doucet, A. J. ⁴	Notre Dame, N.B.
Northumberland.....	33,985	17,110	12,112 ²	Snowball, W. B. ⁴	Newcastle, N.B.
Restigouche and Madawaska.....	42,977	19,108	9,407	Michaud, Pius.....	Edmundston, N.B.
Royal.....	32,078	19,492	13,704	Jones, G. B.....	Apoahqui, N.B.
St. John City and Counties of St. John and Albert.....	69,093	38,838	45,107 ²	(Baxter, Hon. J. B. M. (MacLaren, Murray.....	St. John, N.B. St. John, N.B.
Victoria and Carleton.....	33,900	18,194	11,822	Caldwell, T. W.....	Florenceville, N.B.
Westmoreland.....	53,387	29,619	20,670	Copp, Hon. A. B.....	Ottawa, Ont.
York-Sunbury.....	38,421	21,736	14,750	Hanson, R. B.....	Fredericton, N.B.
Quebec (65 members)—					
Argenteuil.....	17,165	8,927	7,295 ²	Stewart, Hon. Chas. ⁴	Ottawa, Ont.
Bagot.....	18,035	9,393	7,214	Marcile, J. E.....	Actonville, Que.
Beauce.....	53,841	20,968	13,442 ²	Béland, Hon. H. S. ⁴	Ottawa, Ont.
Beauharnois.....	19,888	10,076	8,541	Papineau, L. J.....	Valleyfield, Que.
Bellechasse.....	21,190	9,137	6,335	Fournier, C. A.....	St. Charles, Co. Bellechasse, Que.
Berthier.....	19,817	9,462	7,540	Gervais, Théodore.....	Berthier (en haut), Que.
Bonaventure.....	29,092	13,090	7,781	Marcel, Hon. Chas.....	Ottawa, Ont.
Brome.....	13,471	7,141	5,978	McMaster, A. R.....	Westmount, Que.
Chambly-Verchères.....	34,643	14,800	13,844	Archambault, J.....	Montreal, Que.
Champlain.....	48,009	21,377	16,982	Desaulniers, A. L.....	Ste. Anne de la Pérade, Que.
Charlevoix-Montmorency.....	28,874	12,589	10,646	Casgrain, P. F.....	Montreal, Que.
Châteauguay-Huntingdon.....	26,731	13,427	10,582 ²	Robb, Hon. J. A. ⁴	Ottawa, Ont.
Chicoutimi-Saguenay.....	90,609	34,432	27,152	Savard, Edmond.....	Chicoutimi, Que.
Compton.....	32,285	15,561	12,144	Hunt, A. B.....	Bury, Que.
Dorchester.....	28,954	11,898	8,474	Cannon, Lucien.....	Quebec, Que.
Drummond and Arthabaska.....	44,823	19,925	15,882	Laflamme, J. N. K.....	Montreal, Que.
Gaspé.....	40,375	17,063	12,092	Lemieux, Hon. R.....	Ottawa, Ont.
Hull.....	43,541	20,873	14,543	Fontaine, J. E.....	Hull, Que.
Joliette.....	25,913	12,370	10,275	Denis, J. J.....	Joliette, Que.
Kamouraska.....	22,014	10,139	7,367 ²	Bouchard, G. ⁴	Ste. Anne de la Pocatière, Que.
Labelle.....	35,927	14,654	10,447	Fortier, H. A.....	Hull, Que.
Laprairie and Napierville.....	20,065	9,691	5,675	Lanctôt, Roch.....	St. Constant, Que.
L'Assomption-Montcalm.....	28,318	14,183	9,788	Seguin, P. A.....	L'Assomption, Que.
Laval-Deux Montagnes.....	38,314	13,575	10,095	Ethier, J. A. C.....	St. Scholastique, Que.
Levis.....	33,323	15,465	12,864	Bourassa, J. B.....	St. Romuald, Que.
L'Islet.....	17,859	7,743	5,878	Fafard, J. F.....	L'Islet, Co. L'Islet, Que.
Lotbinière.....	21,837	10,064	7,566	Vien, Thos.....	Quebec, Que.
Maskinongé.....	16,945	7,959	6,133	Desrochers, E.....	St. Didace, Co. Maskinongé, Que.
Matane.....	36,303	15,189	10,411	Pelletier, F. J.....	Matane, Que.
Mégantic.....	33,633	14,188	10,516 ²	Roberge, E. ⁴	Laurierville, Que.
Missisquoi.....	17,709	9,558	8,097	Kay, W. F.....	Phillipsburg, Que.
Montmagny.....	21,997	10,245	6,507	Déchène, A. M.....	Montmagny, Que.
Montreal Island—Hochelaga.....	73,526	30,322	22,573	St. Père, E. C.....	Montreal, Que.

¹From Report of Chief Electoral Officer, 1921.

²Each voter could vote for 2 candidates.

³Votes and voters from returns of general election, 1921.

⁴Messrs. Robichaud, Doucet, Snowball, Stewart, Béland, Robb, Bouchard and Roberge were elected on Nov. 20, 1922, Jan. 12, 1924, Oct. 21, 1924, Feb. 23, 1922, Jan. 19, 1922, Jan. 19, 1922, May 15, 1922, Nov. 20, 1922 respectively.

7.—Representation in the House of Commons, according to the Districts of the Representation Act, 1914, as at Nov. 30, 1924—continued.

Provinces and Districts.	Population, 1921.	Voters on list.	Number of votes polled. ¹	Name of Member.	P.O. Address.
Quebec—con.					
Montreal Island—con.					
Jacques Cartier....	89,297	42,636 ²	30,131 ²	Rhéaume, J. T.....	Montreal, Que.
Laurier-Outremont	72,047	31,492 ²	21,725 ²	Gouin, Hon. Sir Lomer	Ottawa, Ont.
Maisonneuve.....	64,933	24,838	18,487	Robitaille, C.....	Maisonneuve, Que.
St. Ann.....	52,049	22,024	17,453	Walsh, J. C.....	Montreal, Que.
St. Denis.....	78,920	33,418	23,948	Denis, J. A.....	Montreal, Que.
Westmount-St.					
Henry.....	62,909	30,906	25,042	Mercier, Paul.....	Montreal, Que.
St. James.....	42,443	17,593	12,906	Rinfret, F.....	Montreal, Que.
St. Antoine.....	32,394	17,155 ²	14,464 ²	Hushion, W. J.....	Montreal, Que.
St. Lawrence-St.					
George.....	36,912	16,754	13,774	Marler, H.....	Montreal, Que.
Georges Etienne					
Cartier.....	54,800	19,523	13,946	Jacobs, S. W.....	Montreal, Que.
St. Mary.....	63,975	27,330	20,635	Deslauriers, H.....	Montreal, Que.
Nicolet.....	29,695	13,536 ²	10,632 ²	Descoteaux, J. F.....	St. Monique, Que.
Pontiac.....	46,201	24,326	16,701	Cahill, F. S.....	Campbell's Bay, Que.
Portneuf.....	34,452	15,772	11,259	Delisle, M. S.....	Portneuf, Que.
Quebec County.....	31,130	13,249	11,409	Lavigne, H. E.....	Quebec, Que.
Quebec East.....	38,330	14,736 ²	10,490 ²	Lapointe, Hon. E.....	Ottawa, Ont.
Quebec South.....	27,706	12,971	10,667	Power, C. G.....	Quebec, Que.
Quebec West.....	37,993	16,104	13,486	Parent, Geo.....	Quebec, Que.
Richelieu.....	18,764	9,095	6,758	Cardin, Hon. P. J. A.	Ottawa, Ont.
Richmond and Wolfe	42,248	18,420	13,372	Tobin, E. W.....	Bromptonville, Que.
Rimouski.....	27,520	11,221 ²	7,642 ²	Fiset, Sir Eugene.....	Rimouski, Que.
St. Hyacinthe-Rou-					
ville.....	36,754	17,636	14,076	Morin, L. S. R.....	St. Hyacinthe, Que.
St. Johns and Iber-					
ville.....	23,518	11,388	8,765	Benoit, A. J.....	Iberville, Que.
Shefford.....	25,644	12,003	9,044	Boivin, G. H.....	Granby, Que.
Sherbrooke.....	30,786	17,290	13,661	McCrea, F. N.....	Sherbrooke, Que.
Stanstead.....	23,380	12,619	10,041	Baldwin, W. K.....	Coaticook, Que.
Temiscouata.....	44,310	18,141	13,837	Gauvreau, C. A ³	Fraserville, Que.
Terrebonne.....	33,908	15,270	12,593	Prevost, J. E.....	St. Jérôme, Que.
Three Rivers and St.					
Maurice.....	50,845	24,570 ²	20,803 ²	Bureau, Hon. J.....	Ottawa, Ont.
Vaudreuil-Soulanges.	21,620	10,397	8,473	Ouimet, J. R.....	St. Polycarpe, Que.
Wright.....	21,850	10,169	7,737	Gendron, R. M.....	Maniwaki, Que.
Yamaska.....	18,840	8,715	6,638	Boucher, Aimé.....	Pierreville, Que.
Ontario					
(82 members)—					
Algoma, E.....	40,618	16,879	12,356	Carruthers, John.....	Little Current, Ont.
Algoma, W.....	33,676	16,091	10,728	Simpson, T. E.....	Sault Ste. Marie, Ont.
Brant.....	20,085	11,174	8,134	Good, W. C.....	Paris, Ont., R.R. 4.
Brantford.....	33,292	18,537	13,049	Raymond, W. G.....	Brantford, Ont.
Bruce, N.....	20,872	12,278	10,467	Malcolm, James.....	Kincardine, Ont.
Bruce, S.....	23,413	13,752	10,871	Findlay, J. W.....	Elmwood, Ont., R.R. 1.
Carleton.....	32,673	17,185	13,473	Garland, W. F.....	Ottawa, Ont.
Dufferin.....	15,415	10,260	7,823	Woods, R. J.....	Corbetton, Ont., R.R. 2.
Dundas.....	24,388	15,184	11,255	Elliott, Preston.....	Chesterville, Ont.
Durham.....	24,629	16,392	12,516	Bowen, Fred. W.....	Newcastle, Ont., R.R. 2.
Elgin, E.....	17,306	11,057	8,186	Stansell, J. L.....	Staffordville, Ont.
Elgin, W.....	27,678	19,027	12,041	McKillop, H. C.....	West Lorne, Ont.
Essex, N.....	71,150	40,837	19,840	Healy, A. F.....	Windsor, Ont.
Essex, S.....	31,425	17,242 ²	12,410 ²	Graham, Hon. G. P.....	Ottawa, Ont.
Ft. William and					
Rainy River.....	39,661	16,912	11,090	Manion, Hon. R. J.....	Fort William, Ont.
Frontenac.....	20,390	11,694	9,358	Reed, W. S.....	Harrowsmith, Ont., R.R. 2.
Glengarry and Storm-					
ont.....	33,573	21,145	16,224	Kennedy, J. W.....	Apple Hill, Ont.
Grenville.....	16,644	10,748	7,331	Meighan, Rt. Hon. A.....	Ottawa, Ont.
Grey, N.....	30,667	18,945	14,996	Duncan, M. R.....	Owen Sound, Ont.
Grey, S. E.....	28,384	17,371	13,996	Macphail, Agnes C.....	Ceylon, Ont.
Haldimand.....	21,287	13,106	9,828	Senn, M.C.....	Caledonia, Ont., R.R. 3.

¹ From Report of Chief Electoral Officer, 1921.

² Votes and voters from returns of general election, 1921. Messrs. Rhéaume, Gouin, Lapointe, Descoteaux, Bureau, Graham, Hushion and Fiset were elected on Nov. 20, Jan. 19, Jan. 19, May 14, May 21, Jan. 19, 1922, Sept. 2, 1924 and Sept. 2, 1924 respectively.

³ Died Oct. 9, 1924.

7.—Representation in the House of Commons, according to the Districts of the Representation Act, 1914, as at Nov. 30, 1924—continued.

Provinces and Districts.	Population, 1921.	Voters on list.	Number of votes polled. ¹	Name of Member.	P.O. Address.
Ontario—con.					
Halton.....	24,899	15,685	12,207	Anderson, R. K.....	Milton, Ont.
Hamilton, E.....	49,820	32,092	15,162	Mewburn, Hon. S. C....	Hamilton, Ont.
Hamilton, W.....	39,298	28,342	13,553	Stewart, T. J.....	Hamilton, Ont.
Hastings, E.....	23,072	12,613	9,852	Thompson, T. H.....	Madoc, Ont.
Hastings, W.....	34,451	19,029 ³	13,488 ³	Hanna, C. E.....	Belleville, Ont.
Huron, N.....	23,540	15,227	11,838	King, J. W.....	Bluevale, Ont.
Huron, S.....	23,548	14,735	12,148	Black, Wm.....	Seaforth, Ont., R.R. 3.
Kent.....	52,139	30,590 ³	23,629 ³	Murdock, Hon. J.....	Ottawa, Ont.
Kingston.....	24,104	16,789	11,974	Ross, A. E.....	Kingston, Ont.
Lambton, E.....	25,801	15,704	12,532	Fansher, B. W.....	Florence, Ont.
Lambton, W.....	32,888	20,301	15,314	LeSueur, R. V.....	Sarnia, Ont.
Lanark.....	32,993	20,885	15,571	Preston, R. F.....	Carleton Place, Ont.
Leeds.....	34,909	22,526	17,298	Stewart, H. A.....	Brockville, Ont.
Lennox and Addington.....	18,994	11,962	9,371	Sexsmith, E. J.....	Bath, Ont.
Lincoln.....	48,625	28,778	17,433	Chaplin, J. D.....	St. Catharines, Ont.
London.....	53,838	32,907	22,026	White, J. F.....	London, Ont.
Middlesex, E.....	27,994	15,945	10,712	Hodgins, A. L.....	Ettrick, Ont.
Middlesex, W.....	25,033	15,342	12,027	Drummond, J. D. F....	Ailsa Craig, Ont., R.R.3.
Muskoka.....	19,439	11,175	7,189	Hammell, W. J.....	Raymond, Ont.
Nipissing.....	58,565	30,022	18,834	Lapierre, E. A.....	Sudbury, Ont.
Norfolk.....	26,366	15,943	11,686	Wallace, A. A.....	Simcoe, Ont., R.R. 4.
Northumberland.....	30,512	18,444	14,733	Maybee, M. E.....	Trenton, Ont., R.R. 6.
Ontario, N.....	15,420	9,478	7,708	Halbert, R. H.....	Uxbridge, Ont.
Ontario, S.....	31,074	17,968	13,158	Clifford, L. O.....	Oshawa, Ont.
Ottawa.....	93,740	67,821 ²	84,369 ³	(Chevrier, E. R. E.) (McGiverin, Hon. H. B.)	Ottawa, Ont. Ottawa, Ont.
Oxford, N.....	24,527	15,043	12,149	Sinclair, J. D.....	Woodstock, Ont.
Oxford, S.....	22,235	14,175	11,236	Sutherland, D.....	Ingersoll, Ont.
Parkdale.....	80,780	52,233	18,956	Spence, David.....	Toronto, Ont.
Parry Sound.....	27,022	13,365	9,190	Arthurs, James.....	Powassan, Ont.
Peel.....	23,896	16,037	12,057	Charters, Samuel.....	Brampton, Ont.
Perth, N.....	32,461	19,072	14,811	Rankin, J. P.....	Stratford, Ont.
Perth, S.....	18,382	11,291	9,102	Forrester, Wm.....	Mitchell, Ont.
Peterborough, E.....	13,716	8,032	6,471	Brethen, G. A.....	Norwood, Ont., R.R. 1.
Peterborough, W.....	29,318	18,001	11,655	Gordon, G. N.....	Peterborough, Ont.
Port Arthur and Kenora.....	43,300	17,438	10,814	Kennedy, D.....	Dryden, Ont.
Prescott.....	26,478	12,726	8,821	Binette, Joseph.....	St. Anne de Prescott, Ont.
Prince Edward.....	16,806	10,809	8,943	Hubbs, John.....	Pictou, Ont.
Renfrew, N.....	23,956	13,368	10,252	McKay, Matthew.....	Pembroke, Ont.
Renfrew, S.....	27,061	14,550 ³	11,440 ³	Low, Hon. Thos. A.....	Renfrew, Ont.
Russell.....	43,413	21,979 ³	15,965 ³	Murphy, Hon. Chas.....	Ottawa, Ont.
Simcoe, E.....	37,122	20,409	15,697	Chew, Manley.....	Midland, Ont.
Simcoe, N.....	22,100	13,737	10,347	Ross, T. E.....	Guthrie, Ont.
Simcoe, S.....	24,810	15,130	11,329	Boys, W. A.....	Barrie, Ont.
Timiskaming.....	51,568	27,363	16,926	McDonald, A.....	Cobalt, Ont.
Toronto, Centre.....	51,768	30,528	11,161	Bristol, Hon. E.....	Toronto, Ont.
Toronto, E.....	64,825	39,435	15,002	Ryckman, E. B.....	Toronto, Ont.
Toronto, N.....	72,478	47,622	20,985	Church, T. L.....	Toronto, Ont.
Toronto, S.....	37,596	31,907	7,566	Sheard, Chas.....	Toronto, Ont.
Toronto, W.....	68,397	37,199	11,764	Hocken, H. C.....	Toronto, Ont.
Victoria.....	33,995	20,433	15,886	Thurston, J. J.....	Fenelon Falls, Ont.
Waterloo, N.....	41,693	23,778	12,531	Euler, W. D.....	Kitchener, Ont.
Waterloo, S.....	33,568	21,484	14,149	Elliott, Wm.....	Galt, Ont., R.R. 7.
Welland.....	66,668	30,947	21,259	German, W. M.....	Welland, Ont.
Wellington, N.....	19,833	12,204	9,029	Pritchard, John.....	Harriston, Ont.
Wellington, S.....	34,327	23,008	16,957	Guthrie, Hon. Hugh....	Guelph, Ont.
Wentworth.....	64,449	37,976	21,857	Wilson, G. C.....	Dundas, Ont.
York, E.....	77,950	48,783	18,536	Harris, J. H.....	Toronto, Ont.
York, N.....	23,136	14,418 ³	12,273 ³	King, Rt. Hon. W. L. M.	Ottawa, Ont.
York, S.....	100,054	58,499	21,723	Maclean, W. F.....	Toronto, Ont.
York, W.....	70,681	41,925	19,719	Drayton, Hon. Sir H. L.	Ottawa, Ont.

¹From Report of Chief Electoral Officer, 1921.²Each voter could vote for two candidates.³Votes and voters from returns of general election, 1921. Hon. Mr. Murdock, Hon. Mr. Murphy, Hon. Mr. Low, Rt. Hon. Mr. King and Mr. Hanna were elected on Jan. 19, 1922, Jan. 19, 1922, Sept. 6, 1923, Jan. 19, 1922 and Nov. 25, 1924 respectively.

7.—Representation in the House of Commons, according to the Districts of the Representation Act, 1914, as at Nov. 30, 1924—concluded.

Provinces and Districts.	Population, 1921.	Voters on list.	Number of votes polled. ¹	Name of Member.	P.O. Address.
Manitoba (15 members)—					
Brandon.....	40,183	18,896	14,126	Forke, Robert.....	Pipestone, Man.
Dauphin.....	35,482	15,281	9,974	Ward, W. J.....	Dauphin, Man.
Lisgar.....	29,921	9,739	7,783	Brown, J. L.....	Pilot Mound, Man.
Macdonald.....	23,824	11,744	9,084	Lovie, W. J.....	Holland, Man.
Marquette.....	41,254	19,828	14,864	Crerar, Hon. T. A.....	Winnipeg, Man.
Neepawa.....	28,356	13,539	10,069	Milne, Robert.....	Mekiwin, Man.
Nelson.....	19,806	5,888	4,181	Bird, T. W.....	Swan River, Man.
Portage la Prairie.....	22,254	10,491	8,615	Leader, Harry.....	Burnside, Man.
Provencher.....	29,308	9,859	6,824	Beaubien, A. L.....	St. John Baptiste, Man.
Selkirk.....	55,395	21,997	14,926	Bancroft, L. P.....	Guntton, Man.
Souris.....	26,410	13,953	11,110	Steedsmann, James.....	Deloraine, Man.
Springfield.....	58,870	19,832	12,454	Hoey, R. A.....	Winnipeg, Man.
Winnipeg, Centre.....	76,470	35,000	19,643	Woodsworth, J. S.....	Winnipeg, Man.
Winnipeg, N.....	62,957	17,623 ²	10,647 ²	McMurray, Hon. E. J.....	Winnipeg, Man.
Winnipeg, S.....	59,628	31,473	19,641	Hudson, A. B.....	Winnipeg, Man.
Saskatchewan (16 members)—					
Assiniboia.....	34,789	15,411	11,640	Gould, O. R.....	Manor, Sask.
Battleford.....	33,641	16,077	10,822	McConica, T. H.....	Luseland, Sask.
Humboldt.....	55,225	24,135	16,264	Stewart, C. W.....	Lac Vert, Sask.
Kindersley.....	44,772	24,163	17,002	Carmichael, A. M.....	Kindersley, Sask.
Last Mountain.....	50,055	20,195	12,720	Johnston, J. F.....	Bladworth, Sask.
Mackenzie.....	55,629	17,931	11,706	Campbell, M. N.....	Pelly, Sask.
Maple Creek.....	56,064	25,284	17,256	McTaggart, N. H.....	Gull Lake, Sask.
Moose Jaw.....	50,403	25,896	16,322	Hopkins, E. N.....	Moose Jaw, Sask.
N. Battleford.....	47,381	20,696	14,196	Davies, C. C.....	N. Battleford, Sask.
Prince Albert.....	56,829	25,496	15,983	Knox, Andrew.....	Prince Albert, Sask.
Qu'Appelle.....	34,836	16,021	12,100	Millar, John.....	Indian Head, Sask.
Regina.....	49,977	24,389 ²	17,383 ²	Motherwell, Hon. W. R.....	Ottawa, Ont.
Saltcoats.....	43,795	15,602	11,084	Sales, Thomas.....	Tantallon, Sask.
Saskatoon.....	55,151	26,507	15,066	Evans, John.....	Nutana, Sask.
Swift Current.....	53,375	23,776	16,290	Lewis, A. J.....	Lawson, Sask.
Weyburn.....	35,668	14,263	9,247	Morrison, John.....	Yellow Grass, Sask.
Alberta (12 members)—					
Battle River.....	49,173	22,111	15,389	Spencer, H. E.....	Edgerton, Alta.
Bow River.....	55,356	24,720	15,569	Garland, E. J.....	Runsey, Alta.
Calgary, E.....	44,995	22,591	14,285	Irvine, William.....	Calgary, Alta.
Calgary, W.....	44,341	23,534	16,181	Shaw, J. T.....	Calgary, Alta.
Edmonton, E.....	56,548	27,755	13,440	Kellner, D. F.....	Egremont, Alta.
Edmonton, W.....	74,267	38,557	23,167	Kennedy, D. M.....	Waterhole, Alta.
Lethbridge.....	37,699	14,570	10,106	Jelliff, L. H.....	Raley, Alta.
Macleod.....	34,008	15,148	10,212	Coote, G. G.....	Cayley, Alta.
Medicine Hat.....	43,179	21,449	14,212	Gardiner, Robert.....	Excel, Alta.
Red Deer.....	49,629	23,190	15,746	Speakman, A.....	Penhold, Alta.
Strathcona.....	42,520	18,611	11,350	Warner, D. W.....	Edmonton, Alta.
Victoria.....	56,739	21,470	14,167	Lucas, W. T.....	Lougheed, Alta.
British Columbia (13 members)—					
Burrard.....	69,922	35,463	21,991	Clark, J. A.....	Vancouver, B.C.
Cariboo.....	39,834	16,055	11,135	McBride, T. G.....	Stump Lake, Kamloops, B.C.
Comox-Alberni.....	32,009	11,357	7,725	Neill, A. W.....	Alberni, B.C.
Fraser Valley.....	28,811	11,130	8,452	Munro, E. A.....	Chilliwack, B.C., R.R. 2.
Kootenay, E.....	19,137	14,634 ²	5,201 ²	King, Hon. J. H.....	Ottawa, Ont.
Kootenay, W.....	30,502	12,874	9,856	Humphrey, L. W.....	Nelson, B.C.
Nanaimo.....	48,010	21,300	15,066	Dickie, C. H.....	Duncan, B.C.
New Westminster.....	45,982	18,983	12,765	McQuarrie, W. G.....	New Westminster, B.C.
Skeena.....	28,934	9,605	6,579	Stork, Alfred.....	Prince Rupert, B.C.
Vancouver, Centre.....	60,879	31,436	18,219	Stevens, Hon. H. H.....	Vancouver, B.C.
Vancouver, S.....	46,137	19,847	12,985	Ladner, L. J.....	Vancouver, B.C.
Victoria City.....	38,727	18,563	12,603	Tolmie, Hon. S. F.....	Victoria, B.C.
Yale.....	35,698	16,228 ²	12,468 ²	Stirling, G.....	Kelowna, B.C.
Yukon Territory (1 member)—					
Yukon.....	4,157	1,658	1,388	Black, George.....	Dawson, Y.T.

¹From Report of Chief Electoral Officer, 1921.

²Votes and voters from returns of general election, 1921. Hon. Mr. Motherwell, Hon. Mr. McMurray, Hon. Dr. King and Mr. Stirling were elected on Jan. 19, 1922, Oct. 24, 1923, Mar. 14, 1922 and Nov. 6, 1924 respectively.

The 1921 Redistribution Problem.—The population of Quebec, it has been shown, constitutes the basis from which the unit of representation in the other provinces is determined, Quebec's representation of 65 members in the House of Commons remaining constant. The provisions of the Quebec Boundaries Extension Act, 1912, however, while they provided for an enlargement of the area of the province, stipulated that the population of the newly added areas should not be included in any computations relative to representation. Quebec's population in 1921 (excluding the population of Ungava) was 2,358,412, which, divided by 65, gives a unit of representation of 36,283. The quotient, therefore, obtained by dividing the population of each province (Prince Edward Island excepted, where the representatives in the House of Commons may not be fewer than its Senators) as shown at the census, by the unit 36,283, indicates, except where subsection 4 of section 51 of the Act applies, the number of members to which each province is entitled. The method is illustrated in Table 8.

8.—Representation of the Provinces and Territories of Canada in the House of Commons, as determined by the British North America Act and the Censuses of 1911 and 1921.

Provinces.	Census 1911.			Census 1921.		
	Population.	Quotient based on unit.	Representation.	Population.	Quotient based on unit.	Representation.
Prince Edward Island.....	93,728	3.04	4	88,615	2.44	4
Nova Scotia.....	492,338	15.98	16	523,837	14.44	14
New Brunswick.....	351,889	11.42	11	387,876	10.69	11
Ontario.....	2,527,292	82.00	82	2,933,662	80.86	82
Manitoba.....	461,394	14.97	15	610,118	16.82	17
Saskatchewan.....	492,432	15.98	16	767,510	20.88	21
Alberta.....	374,295	12.14	12	588,454	16.22	16
British Columbia.....	392,480	12.74	13	524,582	14.46	14
Quebec (without Ungava)...	2,003,232	65.00	65	2,358,412	65.00	65
Totals.....	7,189,080	—	234	8,773,066	—	244
Quebec (Ungava).....	2,544 ¹	—	—	2,787 ¹	—	—
Yukon.....	8,512	—	1	4,157	—	1
N.W.T.....	6,507	—	—	7,988	—	—
R.C. Navy.....	—	—	—	485	—	—
Canada.....	7,206,643	—	235	8,788,483	—	245

¹ Represents the population in the area added to Quebec by the Quebec Boundaries Extension Act, 1912, the population of which by sec. 2, ss. "A" of said Act, is to be excluded from the population of the province in ascertaining the unit of representation.

Again, the application of the provisions of subsection 4 of section 51 of the Act (quoted above) to Nova Scotia and Ontario (the only provinces in which a noticeable decrease in the rate of growth of population is found) is shown in Table 9, from which it appears that the proportion which the population of Nova Scotia bears to the total population of Canada has declined by more than one-twentieth between 1911 and 1921, while the proportion which the population of Ontario bears to the total has declined by less than one-twentieth. Consequently the representation of Nova Scotia is reduced, while the representation of Ontario remains constant.

9.—Table showing Application of Section 51, Subsection 4, of British North America Act, to Representation of Ontario and Nova Scotia.

Provinces.	Proportion* which population of each province bears to the total population of Canada.		Decrease in proportion from 1911 to 1921.	Ratio of decrease in proportion from 1911 to 1921 to proportion in 1911.	Decrease, greater, equal to or less than one-twentieth of proportion in 1911.
	1911.	1921.			
Ontario.....	·35069	·33380	·01689	·0481	less.
Nova Scotia.....	·06831	·05960	·00871	·1275	greater.

The Representation Act, 1924.—As a result of the census of 1921, a Bill for readjusting the representation in the House of Commons was first introduced in 1923, but was not passed until the close of the 1924 session. This Bill provided for a representation in the fifteenth Parliament of 245 members, taking away 2 members from Nova Scotia (14 instead of 16), and raising the representation of Manitoba from 15 to 17, of Saskatchewan from 16 to 21, of Alberta from 12 to 16, and of British Columbia from 13 to 14, the representation of the rest of the provinces and of the Yukon Territory remaining unaffected.

In the re-allotment of seats among the provinces and the total increase of ten members, considerable changes in the boundaries of constituencies have been effected. A summary of these alterations is appended.

Prince Edward Island.—No change.

Nova Scotia.—The constituencies of Hants and King's are united (Hants-King's); Shelburne and Queen's are divided, the former being added to Yarmouth and the latter to Lunenburg (Queen's-Lunenburg and Shelburne-Yarmouth); South Cape Breton and Richmond, which formerly elected two members are created separate constituencies, each to return one member (Cape Breton South and Richmond-West Cape Breton).

New Brunswick.—No change, except in the name of St. John City and Counties of St. John and Albert which is re-named St. John-Albert.

Quebec.—While the number of members is unchanged, the ridings of Missisquoi and Brome are combined, as are also those of Berthier and Maskinongé (Missisquoi-Brome and Berthier-Maskinongé); Chicoutimi-Saguenay is divided, Chicoutimi being created a separate riding while Saguenay is added to Charlevoix (Charlevoix-Saguenay); Montmorency, formerly united with Charlevoix, is joined with part of Quebec County in a new constituency (Quebec-Montmorency); a new constituency is created under the name of Lake St. John, while another new one (Mount Royal), on the island of Montreal, includes Westmount, Notre Dame de Grace, Montreal West, Hampstead and Mount Royal; St. Henri is made a separate riding and Georges Etienne Cartier is re-named Cartier.

Ontario.—The riding of Stormont and Glengarry is divided into two separate constituencies; Dundas and Grenville are united (Dundas-Grenville); Lennox and Addington are divided and added respectively to Prince Edward and Frontenac (Prince Edward-Lennox and Frontenac-Addington); Hastings West is re-named Hastings South and Hastings East is added to Peterborough (Hastings-Peterborough); North Ontario is joined to Muskoka (Muskoka-Ontario), South Simcoe to Dufferin (Dufferin-Simcoe) and East Elgin to Norfolk (Norfolk-Elgin); Essex is given three seats (East, South and West) and Timiskaming two (North and South); the ridings of Fort William, Kenora-Rainy River and Port Arthur-Thunder Bay replace Fort William-Rainy River and Port Arthur-Kenora; North, South and West York replace the present four ridings, while Toronto's representation

is increased by four seats and now is composed of Parkdale, Toronto East, Toronto East Centre, Toronto-High Park, Toronto Northeast, Toronto Northwest, Toronto-Scarborough, Toronto South and Toronto West Centre.

Manitoba.—Winnipeg Centre is replaced by Winnipeg North Centre and Winnipeg South Centre, while St. Boniface is created a separate constituency.

Saskatchewan.—Six new seats are created—Long Lake, Melville, Melfort, Rosetown, Willowbunch and Yorkton. The riding of Saltcoats is eliminated.

Alberta.—In the increase of four seats from Alberta, the ridings of Victoria and Strathcona are done away with and new seats for Acadia, Athabaska, Camrose, Peace River, Vegreville and Wetaskiwin are created.

British Columbia.—A new seat is created in Vancouver, Centre, North and South ridings now replacing the former Vancouver Centre and Vancouver South.

Yukon.—No change.

2.—Provincial Governments.

Table 10 gives the names and areas, as in 1924, of the several provinces, territories and provisional districts of the Dominion, together with the dates of their creation or admission into the Confederation and the legislative process by which this was effected.

10.—Provinces and Territories of Canada, with present Areas, Dates of Admission to Confederation and Legislative Process by which this was effected.

Province, Territory or District.	Date of Admission or Creation.	Legislative Process.	Present Area (square miles).		
			Land.	Water.	Total.
Ontario.....	July 1, 1867	Act of Imperial Parliament—	365,880	41,382	407,262 ¹
Quebec.....	" 1, 1867	The British North America	690,865	15,969	706,834 ²
Nova Scotia.....	" 1, 1867	Act, 1867 (30-31 Vict., c. 3), and	21,068	360	21,428
New Brunswick.....	" 1, 1867	Imperial Order in Council of	27,911	74	27,985
		May 22, 1867.			
Manitoba.....	" 15, 1870	Manitoba Act, 1870 (33 Vict., c. 3) and Imperial Order in Council, June 23, 1870.	231,926	19,906	251,832 ³
British Columbia....	" 20, 1871	Imperial Order in Council, May 16, 1871.	353,416	2,439	355,855
Prince Edward Isl'd	" 1, 1873	Imperial Order in Council, June 26, 1873.	2,184	—	2,184
Saskatchewan.....	Sept. 1, 1905	Saskatchewan Act, 1905 (4-5 Edw. VII, c. 42.)	243,381	8,319	251,700 ⁴
Alberta.....	" 1, 1905	Alberta Act, 1905 (4-5 Edw. VII, c. 3).	252,925	2,360	255,285 ⁴
Yukon.....	June 13, 1898	Yukon Territory Act, 1898 (61 Vict., c. 6).	206,427	649	207,076
Mackenzie.....	Jan. 1, 1920	{ Order in Council, March 16, 1918 }	501,953	27,447	529,400 ⁵
Keewatin.....	" 1, 1920		205,973	6,851	212,824 ⁵
Franklin.....	" 1, 1920		500,000	—	500,000 ⁵
Total.....			3,603,909	125,756	3,729,665

¹ This area was increased by the Canada (Ontario Boundary) Act, 1889, and the Ontario Boundaries Extension Act, 1912 (2 Geo. V, c. 40).

² Increased by Order in Council of July 6, 1896, and Quebec Boundaries Extension Act, 1912 (2 Geo. V, c. 45).

³ Increased by Extension of Boundaries of Manitoba Act, 1881, and Manitoba Boundaries Extension Act, 1912 (2 Geo. V, c. 32).

⁴ Alberta and Saskatchewan now cover approximately the area formerly comprised in the districts of Assiniboia, Athabaska, Alberta and Saskatchewan, established May 17, 1882, by minute of Canadian P.C. concurred in by Dominion Parliament and Order in Council of Oct. 2, 1895.

⁵ By an Order in Council of June 23, 1870, Rupert's Land, acquired under the Rupert's Land Acts of 1867 and 1868, and the undefined Northern Territories were admitted into the Confederation. The original Northwest Territories, mentioned in the Manitoba Act, 1870, were established by the Northwest Territories Act, 1880 (43 Vict., c. 25), the district of Keewatin having been previously defined by an Act of the Dominion Parliament (39 Vict., c. 21). The provisional districts of Yukon, Mackenzie, Franklin and Ungava were defined in an Order in Council of Oct. 2, 1895, their boundaries being changed by Order in Council of Dec. 18, 1897. By Order in Council of July 24, 1905, the area of Keewatin, not included in the Northwest Territories, was annexed to the latter from Sept. 1, 1905. By the Extension of Boundaries Act, 1912, Ungava was made a part of the province of Quebec, and the remaining area of the Northwest Territories south of 60° N. latitude was divided between Manitoba and Ontario.

Lieutenant-Governors, Legislatures and Ministries in the Provinces.—

In each of the provinces the King is represented by a Lieutenant-Governor, appointed by the Governor-General in Council, and governing with the advice and assistance of his Ministry or Executive Council, which is responsible to the Legislature and resigns office when it ceases to enjoy the confidence of that body. The Legislatures of all the provinces with the exception of Quebec and Nova Scotia are uni-cameral, consisting of a Legislative Assembly elected by the people. In Quebec and Nova Scotia there is a Legislative Council as well as a Legislative Assembly.

The Lieutenant-Governors of the provinces, details regarding the Legislatures and Ministries since Confederation, together with the names of the Ministers of the present administrations, are given in Table 11. For a detailed description of the Provincial Governments, the reader is referred to Section IV of the Year Book of 1922-23, "Provincial and Local Government."

11.—Lieutenant-Governors, Legislatures and Ministries of Provinces, 1867-1924.

PRINCE EDWARD ISLAND.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
W. C. F. Robinson.....	June 10, 1873	P. A. MacIntyre.....	May 13, 1899
Sir Robert Hodgson.....	Nov. 22, 1873	D. A. McKinnon.....	Oct. 3, 1904
Thomas H. Haviland.....	July 14, 1879	Benjamin Rogers.....	June 1, 1910
Andrew Archibald Macdonald.....	Aug. 1, 1884	A. C. Macdonald.....	June 2, 1915
Jedediah S. Carvell.....	Sept. 21, 1889	Murdock McKinnon.....	Sept. 3, 1919
Geo. W. Howlan.....	Feb. 21, 1894	Frank R. Heartz.....	Sept. 8, 1924

LEGISLATURES.

Legislature.	Number of Sessions.	Date of First Opening.	Date of Dissolution.
1st.....	3	Mar. 5, 1874.....	July 1, 1876
2nd.....	3	Mar. 15, 1877.....	Mar. 12, 1879
3rd.....	4	April 24, 1879.....	April 15, 1882
4th.....	4	Mar. 20, 1883.....	June 5, 1886
5th.....	3	Mar. 29, 1887.....	Jan. 7, 1890
6th.....	4	Mar. 27, 1890.....	Nov. 18, 1893
7th.....	4	Mar. 28, 1894.....	June 2, 1897
8th Gen. Assembly.....	3	April 5, 1898.....	Nov. 14, 1900
9th Gen. Assembly.....	4	Mar. 19, 1901.....	Nov. 9, 1904
10th Gen. Assembly.....	4	Feb. 8, 1905.....	Oct. 15, 1908
11th Gen. Assembly.....	3	Feb. 2, 1909.....	Dec. 5, 1911
12th Gen. Assembly.....	4	Mar. 7, 1912.....	Aug. 21, 1915
13th Gen. Assembly.....	5	Mar. 29, 1916.....	June 26, 1919
14th Gen. Assembly.....	4	Mar. 6, 1920.....	June 14, 1923
15th Gen. Assembly.....	—	Mar. 12, 1924.....	

MINISTRIES.

Ministry.	Premier.	Date of Formation.
1.....	Hon. L. C. Owen.....	July —, 1873
2.....	Hon. L. H. Davies.....	Aug. —, 1876
3.....	Hon. W. W. Sullivan.....	April —, 1879
4.....	Hon. N. McLeod.....	Nov. —, 1889
5.....	Hon. F. Peters.....	April —, 1891
6.....	Hon. A. B. Warburton.....	Oct. —, 1897
7.....	Hon. D. Farquharson.....	Aug. —, 1898
8.....	Hon. A. Peters.....	Dec. 29, 1901
9.....	Hon. F. L. Haszard.....	Feb. 1, 1908
10.....	Hon. James Palmer.....	May 16, 1911
11.....	Hon. John A. Mathieson.....	Dec. 2, 1911
12.....	Hon. Aubin A. Arseneault.....	June 21, 1917
13.....	Hon. J. H. Bell.....	Sept. 9, 1919
14.....	Hon. J. D. Stewart.....	Sept. 5, 1923

11.—Lieutenant-Governors, Legislatures and Ministries of Provinces, 1867-1924—con.

THE STEWART (PRESENT) MINISTRY.

Office.	Name.	Date of Appointment.
Premier, President of the Council, and Attorney and Advocate General.....	Hon. J. D. Stewart.....	Sept. 5, 1923
Provincial Secretary-Treasurer and Minister of Agriculture.....	Hon. J. H. Myers.....	Sept. 5, 1923
Minister of Public Works.....	Hon. J. A. Macdonald.....	Sept. 5, 1923
Minister without Portfolio.....	Hon. J. A. McNeill.....	Sept. 5, 1923
Minister without Portfolio.....	Hon. Murdock Kennedy.....	Sept. 5, 1923
Minister without Portfolio.....	Hon. L. J. Wood.....	Sept. 5, 1923
Minister without Portfolio.....	Hon. A. P. Prowse.....	Sept. 5, 1923
Minister without Portfolio.....	Hon. W. J. P. McMillan.....	Sept. 5, 1923
Minister without Portfolio.....	Hon. A. F. Arsenaault.....	Sept. 5, 1923

NOVA SCOTIA.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
Lieut.-Gen. Sir W. F. Williams.....	July 1, 1867	Malachy Bowes Daly.....	July 11, 1890
Major-Gen. Sir C. Hastings Doyle.....	Oct. 18, 1867	Malachy Bowes Daly.....	¹ July 29, 1895
Lieut.-Gen. Sir C. Hastings Doyle.....	Jan. 31, 1868	Alfred G. Jones.....	Aug. 7, 1900
Sir E. Kenny (acting).....	May 31, 1870	Duncan C. Fraser.....	Mar. 27, 1906
Joseph Howe.....	May 1, 1873	James D. McGregor.....	Oct. 18, 1910
A. G. Archibald.....	July 4, 1873	David MacKeen.....	Oct. 19, 1915
Matthew Henry Richey.....	July 4, 1883	McCallum Grant.....	Nov. 29, 1916
A. W. McLelan.....	July 9, 1888	McCallum Grant.....	¹ Mar. 21, 1922

¹ Second term.

LEGISLATURES.

Legislature.	Number of Sessions.	Date of First Opening.	Date of Dissolution.
1st.....	4	Jan. 30, 1868.....	April 17, 1871
2nd.....	3	Feb. 22, 1872.....	Nov. 23, 1874
3rd.....	4	Mar. 11, 1875.....	Aug. 21, 1878
4th.....	4	Mar. 6, 1879.....	May 23, 1882
5th.....	4	Feb. 8, 1883.....	May 20, 1885
6th.....	4	Mar. 10, 1887.....	April 21, 1890
7th.....	4	April 2, 1891.....	Feb. 15, 1894
8th.....	3	Jan. 31, 1895.....	Mar. 20, 1897
9th.....	4	Jan. 27, 1898.....	Sept. 3, 1901
10th.....	4	Feb. 13, 1902.....	May 27, 1906
11th.....	5	Feb. 19, 1906.....	May 15, 1911
12th.....	6	Feb. 23, 1911.....	May 22, 1916
13th.....	4	Feb. 22, 1917.....	June 28, 1920
14th.....	—	Mar. 9, 1921.....	—

MINISTRIES.

Ministry.	Premier.	Date of Formation.
1.....	Hon. H. Blanchard.....	July 4, 1867
2.....	Hon. Wm. Annard.....	Nov. 7, 1867
3.....	Hon. P. C. Hill.....	May —, 1875
4.....	Hon. S. D. Holmes.....	Oct. —, 1878
5.....	Hon. J. S. D. Thompson.....	May —, 1882
6.....	Hon. W. T. Pipes.....	Aug. —, 1882
7.....	Hon. W. S. Fielding.....	July —, 1884
8.....	Hon. Geo. H. Murray.....	July 20, 1896
9.....	Hon. E. H. Armstrong.....	Jan. 24, 1923

11.—Lieutenant-Governors, Legislatures and Ministries of Provinces, 1867-1924—con.

THE ARMSTRONG (PRESENT) MINISTRY.

Office.	Name.	Date of Appointment.
Premier, President of Council, and Minister of Public Works and Mines..	Hon. E. H. Armstrong.....	Jan. 24, 1923
Provincial Secretary.....	Hon. D. A. Cameron.....	Jan. 24, 1923
Attorney General.....	Hon. W. J. O'Hearn.....	Jan. 24, 1923
Minister of Highways.....	Hon. W. Chisholm.....	Jan. 24, 1923
Minister without Portfolio.	Hon. R. M. Macgregor.....	June 28, 1911
Minister without Portfolio.	Hon. O. T. Daniels.....	Jan. 24, 1923
Minister without Portfolio.	Hon. J. C. Tory.....	Mar. 22, 1921
Minister without Portfolio.	Hon. J. W. Comeau.....	May 26, 1921
Minister without Portfolio.	Hon. J. J. Kinley.....	Feb. 13, 1923
Minister without Portfolio.	Hon. J. A. McDonald.....	Feb. 13, 1923

NEW BRUNSWICK.
LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
Major-Gen. Sir C. Hastings Doyle..	July 1, 1867	John A. Fraser.....	Dec. 20, 1893
Col. F. P. Harding.....	Oct. 18, 1867	A. R. McClellan.....	Dec. 9, 1896
L. A. Wilmot.....	July 14, 1868	Jabez B. Snowball.....	Feb. 5, 1902
Samuel Leonard Tilley.....	Nov. 5, 1873	L. J. Tweedie.....	Mar. 2, 1907
E. Baron Chandler.....	July 16, 1878	Josiah Wood.....	June 6, 1912
Robert Duncan Wilmot.....	Feb. 11, 1880	G. W. Ganong.....	Mar. 29, 1916
Sir Samuel Leonard Tilley.....	Oct. 31, 1885	William Pugsley.....	Nov. 6, 1917
John Boyd.....	Sept. 21, 1893	William F. Todd.....	Feb. 24, 1923

LEGISLATURES.

Legislature.	Number of Sessions.	Date of First Opening.	Date of Dissolution.
1st.....	3	Feb. 13, 1868.....	June 3, 1870
2nd.....	5	Feb. 16, 1870.....	May 15, 1874
3rd.....	5	Feb. 18, 1875.....	May 14, 1878
4th.....	4	Feb. 27, 1879.....	May 25, 1882
5th.....	5	Feb. 28, 1883.....	April 2, 1886
6th.....	3	Mar. 3, 1887.....	Dec. 30, 1889
7th.....	3	Mar. 13, 1890.....	Sept. 28, 1892
1st (new order) ¹	3	Mar. 9, 1893.....	Sept. 26, 1895
2nd.....	3	Feb. 13, 1896.....	Jan. 28, 1899
3rd.....	4	Mar. 23, 1899.....	Feb. 5, 1903
4th.....	5	Mar. 26, 1903.....	Jan. 23, 1908
5th.....	5	April 30, 1908.....	May 25, 1912
6th.....	4	Feb. 13, 1913.....	Jan. 20, 1917
7th.....	4	May 10, 1917.....	Sept. 16, 1920
8th.....	—	Mar. 17, 1921.....	—

¹Since the abolition of the Legislative Council of New Brunswick in 1892, the legislatures of that province have been officially re-numbered.

MINISTRIES.

Ministry.	Premier.	Date of Formation.
1.....	Hon. A. R. Wetmore.....	1867
2.....	Hon. G. E. King.....	1872
3.....	Hon. J. J. Fraser.....	1873
4.....	Hon. D. L. Hanmington.....	1882
5.....	Hon. A. G. Blair.....	1883
6.....	Hon. Jas. Mitchell.....	July —, 1896
7.....	Hon. H. R. Emmerson.....	Oct. —, 1897
8.....	Hon. L. J. Tweedie.....	Aug. 31, 1900
9.....	Hon. Wm. Pugsley.....	Mar. 6, 1907
10.....	Hon. C. W. Robinson.....	May 31, 1907
11.....	Hon. J. D. Hazen.....	Mar. 24, 1908
12.....	Hon. James K. Flemming.....	Oct. 16, 1911
13.....	Hon. George J. Clarke.....	Dec. 17, 1914
14.....	Hon. James A. Murray.....	Feb. 1, 1917
15.....	Hon. Walter E. Foster.....	April 4, 1917
16.....	Hon. P. J. Veniot.....	Jan. 25, 1923

11.—Lieutenant-Governors, Legislatures and Ministries of Provinces, 1867-1924—con.

THE VENIOT (PRESENT) MINISTRY.

Office.	Name.	Date of Appointment.
Premier and Minister of Public Works.	Hon. P. J. Veniot.....	Jan. 25, 1923
President of Council.....	Hon. Fred Magee.....	Oct. 1, 1920
Attorney General.....	Hon. I. C. Rand.....	Nov. 4, 1924
Provincial Secretary-Treasurer.....	Hon. Judson E. Hetherington.....	Dec. 2, 1920
Minister of Lands and Mines.....	Hon. C. W. Robinson.....	Oct. 1, 1920
Minister of Agriculture.....	Hon. D. W. Mersereau.....	Dec. 2, 1920
Minister of Health.....	Hon. W. F. Roberts.....	April 4, 1917
Minister without Portfolio.....	Hon. J. E. Michaud.....	Jan. 4, 1921

QUEBEC.

LIEUTENANT GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
Sir N. F. Belleau.....	July 1, 1867	L. A. Jetté.....	Feb. 2, 1898
Sir N. F. Belleau.....	Jan. 31, 1868	L. A. Jetté.....	Feb. 2, 1903
Réné Edouard Caron.....	Feb. 11, 1873	Sir Charles A. P. Pelletier.....	Sept. 4, 1908
Luc Letellier de St. Just.....	Dec. 15, 1876	Sir François Langelier.....	May 5, 1911
Theodore Robitaille.....	July 26, 1879	Sir Pierre E. Leblanc.....	Feb. 9, 1915
L. F. R. Masson.....	Nov. 7, 1884	Right Hon. Sir Charles Fitzpatrick.....	Oct. 21, 1918
A. R. Angers.....	Oct. 24, 1887	Hon. L. P. Brodeur.....	Oct. 31, 1923
Sir J. A. Chapleau.....	Dec. 5, 1892	Hon. N. Pérodeau.....	Jan. 8, 1924

¹Second term.

LEGISLATURES.

Legislature.	Number of Sessions.	Date of First Opening.	Date of Dissolution.
1st.....	4	Dec. 27, 1867.....	May 27, 1871
2nd.....	4	Nov. 7, 1871.....	June 7, 1875
3rd.....	3	Nov. 4, 1875.....	Mar. 22, 1878
4th.....	4	June 4, 1878.....	Nov. 7, 1881
5th.....	5	Mar. 8, 1882.....	Sept. 9, 1886
6th.....	4	Jan. 27, 1887.....	May 10, 1890
7th.....	1	Nov. 4, 1890.....	Dec. 22, 1891
8th.....	6	April 26, 1892.....	Mar. 6, 1897
9th.....	3	Nov. 23, 1897.....	Nov. 14, 1900
10th.....	4	Feb. 14, 1901.....	Nov. 4, 1904
11th.....	4	Mar. 2, 1905.....	May 6, 1908
12th.....	4	Mar. 2, 1909.....	April 15, 1912
13th.....	4	Nov. 5, 1912.....	April 14, 1916
14th.....	3	Nov. 17, 1916.....	May 22, 1919
15th.....	4	Dec. 10, 1919.....	Jan. 10, 1923
16th.....	—	Dec. 17, 1923.....	—

MINISTRIES.

Ministry.	Premier.	Date of Formation.
1.....	Hon. P. J. Chauveau.....	July 15, 1867
2.....	Hon. G. Ouimet.....	Feb. 26, 1873
3.....	Hon. C. E. B. De Boucherville.....	Sept. 22, 1874
4.....	Hon. H. G. Joly.....	Mar. 8, 1876
5.....	Hon. J. A. Chapleau.....	Oct. 30, 1879
6.....	Hon. J. A. Mousseau.....	July 31, 1882
7.....	Hon. J. J. Ross.....	Jan. 23, 1884
8.....	Hon. L. O. Taillon.....	Jan. 25, 1887
9.....	Hon. H. Mercier.....	Jan. 27, 1887
10.....	Hon. C. E. B. De Boucherville.....	Dec. 21, 1891
11.....	Hon. L. O. Taillon.....	Dec. 16, 1892
12.....	Hon. E. J. Flynn.....	May 12, 1896
13.....	Hon. F. G. Marchand.....	May 26, 1897
14.....	Hon. S. N. Parent.....	Oct. 3, 1900
15.....	Hon. Sir L. Gouin.....	Mar. 23, 1905
16.....	Hon. Louis Alexandre Taschereau.....	July 8, 1920

11.—Lieutenant-Governors, Legislatures and Ministries of Provinces, 1867-1924—con.

THE TASCHEREAU (PRESENT) MINISTRY.

Office.	Name.	Date of Appointment.
Prime Minister and Attorney General.	Hon. L. A. Taschereau.....	July 9, 1920
Minister of Agriculture.....	Hon. J. E. Caron.....	Nov. 18, 1909
Minister of Lands and Forests.....	Hon. H. Mercier.....	Aug. 25, 1919
Minister of Public Works and Labour..	Hon. A. Galipeault.....	Aug. 25, 1919
Minister of Mines, Fisheries and Colonization.....	Hon. J. E. Perrault.....	Aug. 25, 1919
Provincial Secretary and Registrar....	Hon. A. David.....	Aug. 25, 1919
Minister of Roads.....	Hon. J. L. Perron.....	Sept. 27, 1921
Minister without Portfolio.....	Hon. E. Moreau.....	Sept. 20, 1921
Provincial Treasurer and Minister of Municipal Affairs.....	Hon. J. Nicol.....	Nov. 23, 1921
Minister without Portfolio.....	Hon. M. Madden.....	Nov. 7, 1923

ONTARIO.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
Major-Gen. H. W. Stisted.....	July 1, 1867	Sir Oliver Mowat.....	Nov. 18, 1897
W. P. Howland.....	July 14, 1868	Sir William Mortimer Clark.....	April 20, 1903
John W. Crawford.....	Nov. 5, 1873	Sir John M. Gibson.....	Sept. 22, 1908
D. A. Macdonald.....	May 18, 1875	Lt.-Col. Sir John S. Hendrie.....	Sept. 26, 1914
John Beverly Robinson.....	June 30, 1880	Lionel H. Clark.....	Nov. 27, 1919
Sir Alexander Campbell.....	Feb. 8, 1887	Henry Cockshutt.....	Sept. 10, 1921
Sir George A. Kirkpatrick.....	May 30, 1892		

LEGISLATURES.

Legislature.	Number of Sessions.	Date of First Opening.	Date of Dissolution.
1st.....	4	Dec. 27, 1867.....	Feb. 25, 1871
2nd.....	4	Dec. 7, 1872.....	Dec. 23, 1874
3rd.....	4	Nov. 24, 1875.....	April 25, 1879
4th.....	4	Jan. 7, 1880.....	Feb. 1, 1883
5th.....	3	Jan. 23, 1884.....	Nov. 15, 1886
6th.....	4	Feb. 10, 1887.....	April 26, 1890
7th.....	4	Feb. 11, 1891.....	May 29, 1894
8th.....	4	Feb. 21, 1895.....	Jan. 28, 1898
9th.....	5	Aug. 3, 1898.....	April 19, 1902
10th.....	2	Mar. 10, 1903.....	Dec. 13, 1904
11th.....	4	Mar. 22, 1905.....	May 2, 1908
12th.....	3	Feb. 16, 1909.....	Nov. 13, 1911
13th.....	3	Feb. 7, 1912.....	May 29, 1914
14th.....	5	Feb. 16, 1915.....	Sept. 29, 1919
15th.....	4	Mar. 9, 1920.....	May 4, 1923
16th.....	—	Feb. 6, 1924.....	—

MINISTRIES.

Ministry.	Premier.	Date of Formation.
1.....	Hon. J. S. Macdonald.....	July 16, 1867
2.....	Hon. E. Blake.....	Dec. 30, 1871
3.....	Hon. O. Mowat.....	Oct. 25, 1872
4.....	Hon. A. S. Hardy.....	July 25, 1896
5.....	Hon. G. W. Ross.....	Oct. 21, 1899
6.....	Hon. Sir J. P. Whitney.....	Feb. 8, 1905
7.....	Hon. Sir William Howard Hearst.....	Oct. 2, 1914
8.....	Hon. Ernest Charles Drury.....	Nov. 14, 1919
9.....	Hon. George Howard Ferguson.....	July 16, 1923

11.—Lieutenant-Governors, Legislatures and Ministries of Provinces, 1867-1924—con.

THE FERGUSON (PRESENT) MINISTRY.

Office.	Name.	Date of Appointment.
Premier and Minister of Education.....	Hon. G. H. Ferguson.....	July 16, 1923
Attorney General.....	Hon. W. F. Nickel.....	July 16, 1923
Minister of Public Works and Highways.....	Hon. Geo. S. Henry.....	July 16, 1923
Provincial Treasurer.....	Hon. W. H. Price.....	July 16, 1923
Minister of Mines.....	Hon. Charles McCrae.....	July 16, 1923
Minister of Public Health and Labour.....	Hon. Dr. Forbes Godfrey.....	July 16, 1923
Minister of Agriculture.....	Hon. John S. Martin.....	July 16, 1923
Provincial Secretary.....	Hon. Lincoln Goldie.....	July 16, 1923
Minister of Lands and Forests.....	Hon. James W. Lyons.....	July 16, 1923
Minister without Portfolio.....	Hon. Sir Adam Beck.....	July 16, 1923
Minister without Portfolio.....	Hon. Dr. Leeming Carr.....	July 16, 1923
Minister without Portfolio.....	Hon. J. R. Cooke.....	July 16, 1923

MANITOBA.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
A. G. Archibald.....	May 20, 1870	J. C. Patterson.....	Sept. 2, 1895
Francis Goodschall Johnson.....	April 9, 1872	Sir D. H. McMillan.....	Oct. 16, 1900
Alexander Morris.....	Dec. 2, 1872	Sir D. H. McMillan.....	May 11, 1906
Joseph Ed. Cauchon.....	Dec. 2, 1877	D. C. Cameron.....	Aug. 1, 1911
James C. Atkins.....	Sept. 22, 1882	Sir James A. M. Aikins.....	Aug. 3, 1916
J. C. Shultz.....	July 1, 1888	Sir James A. M. Aikins.....	Aug. 7, 1921

¹ Second term.

LEGISLATURES.

Legislature.	Number of Sessions.	Date of First Opening.	Date of Dissolution.
1st.....	4	Mar. 15, 1871.....	Dec. 16, 1874
2nd.....	4	Mar. 31, 1875.....	Nov. 11, 1878
3rd.....	1	Feb. 1, 1879.....	Nov. 26, 1879
4th.....	4	Jan. 22, 1880.....	Nov. 13, 1882
5th.....	4	May 17, 1883.....	Nov. 11, 1886
6th.....	2	April 14, 1887.....	June 16, 1888
7th.....	5	Aug. 28, 1888.....	June 27, 1892
8th.....	3	Feb. 2, 1893.....	Dec. 11, 1895
9th.....	4	Feb. 6, 1896.....	Nov. 16, 1899
10th.....	4	Mar. 29, 1900.....	June 25, 1903
11th.....	4	Jan. 7, 1904.....	Feb. 28, 1907
12th.....	3	Jan. 2, 1908.....	June 20, 1910
13th.....	4	Feb. 9, 1911.....	June 15, 1914
14th.....	2	Sept. 18, 1914.....	July 16, 1915
15th.....	5	Jan. 6, 1916.....	Mar. 27, 1920
16th.....	2	Feb. 10, 1921.....	June 24, 1922
17th.....	—	Jan. 18, 1923.....	—

MINISTRIES.

Ministry.	Premier.	Date of Formation.
1.....	Hon. A. Boyd.....	Sept. 16, 1870
2.....	Hon. N. A. Girard.....	Dec. 14, 1871
3.....	Hon. H. J. H. Clarke.....	Mar. 14, 1872
4.....	Hon. N. A. Girard.....	July 8, 1874
5.....	Hon. R. A. Davis.....	Dec. 3, 1874
6.....	Hon. John Norquay.....	Oct. 16, 1878
7.....	Hon. D. H. Harrison.....	Dec. 26, 1887
8.....	Hon. T. Greenway.....	Jan. 19, 1888
9.....	Hon. H. J. Macdonald.....	Jan. 8, 1900
10.....	Hon. Sir R. P. Roblin.....	Oct. 29, 1900
11.....	Hon. T. C. Norris.....	May 12, 1915
12.....	Hon. John Bracken.....	Aug. 8, 1922

11.—Lieutenant-Governors, Legislatures and Ministries of Provinces, 1867-1924—con.

THE BRACKEN (PRESENT) MINISTRY.

Office.	Name.	Date of Appointment.
Prime Minister.....	Hon. John Bracken.....	Aug. 8, 1922
Attorney General.....	Hon. R. W. Craig.....	Aug. 8, 1922
Minister of Public Works.....	Hon. W. R. Clubb.....	Aug. 8, 1922
Provincial Treasurer and Minister of Telegraphs and Telephones.....	Hon. F. M. Black.....	Aug. 8, 1922
Minister without Portfolio.....	Hon. Neil Cameron.....	Aug. 8, 1922
Municipal Commissioner.....	Hon. D. L. McLeod.....	Aug. 8, 1922
Minister of Agriculture and Immigration.....	Hon. John Bracken.....	Dec. 3, 1923
Minister of Education.....	Hon. Chas. Casson.....	Dec. 3, 1923
Provincial Secretary, Railway Commis- sioner and Provincial Lands Commis- sioner.....	Hon. A. Prefontaine.....	Dec. 3, 1923

SASKATCHEWAN.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
A. E. Forget.....	Sept. 1, 1905	Sir Richard Stuart Lake.....	Oct. 6, 1915
Geo. W. Brown.....	Oct. 5, 1910	H. W. Newlands.....	Feb. 17, 1921

LEGISLATURES.

Legislature.	Number of Sessions.	Date of First Opening.	Date of Dissolution.
1st.....	3	Mar. 29, 1906.....	July 20, 1908
2nd.....	4	Dec. 10, 1908.....	June 15, 1912
3rd.....	6	Nov. 14, 1912.....	June 2, 1917
4th.....	4	Nov. 13, 1917.....	May 16, 1921
5th.....	4	Dec. 8, 1921.....	—

MINISTRIES.

Ministry.	Premier.	Date of Formation.
1.....	Hon. Walter Scott.....	Sept. 5, 1905
2.....	Hon. W. M. Martin.....	Oct. 20, 1916
3.....	Hon. C. A. Dunning.....	April 5, 1922

THE DUNNING (PRESENT) MINISTRY.

Office.	Name.	Date of Appointment.
Premier, President of Council, Provin- cial Treasurer and Minister of Rail- ways.....	Hon. C. A. Dunning.....	Oct. 20, 1916
Minister of Public Works and Minister of Telephones.....	Hon. A. P. McNab.....	Dec. 10, 1908
Minister of Education and Minister in charge of Bureau of Publications and King's Printer's Office.....	Hon. S. J. Latta.....	Oct. 20, 1917
Minister of Agriculture and Minister of Municipal Affairs.....	Hon. C. M. Hamilton.....	April 27, 1920
Minister of Highways and Minister in charge of Bureau of Labour and In- dustries.....	Hon. J. G. Gardiner.....	April 5, 1922
Attorney General and Minister in charge of Bureau of Child Protection.....	Hon. J. A. Cross.....	April 5, 1922
Provincial Secretary and Minister of Public Health.....	Hon. J. M. Uhrich.....	April 5, 1922

11.—Lieutenant-Governors, Legislatures and Ministries of Provinces, 1867-1924—con.

ALBERTA.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
George H. V. Bulyea.....	Sept. 1, 1905	Robert George Brett.....	Oct. 6, 1915
George H. V. Bulyea.....	¹ Oct. 5, 1910	Robert George Brett.....	¹ Oct. 20, 1920

¹Second term.

LEGISLATURES.

Legislature.	Number of Sessions.	Date of First Opening.	Date of Dissolution.
1st.....	4	Mar. 15, 1906.....	—, 1909
2nd.....	4	Feb. 10, 1910.....	Mar. 25, 1913
3rd.....	5	Sept. 16, 1913.....	May 14, 1917
4th.....	4	Feb. 7, 1918.....	June 23, 1921
5th.....	5	Feb. 2, 1922.....	—

MINISTRIES.

Ministry.	Premier.	Date of Formation.
1.....	Hon. Alex. Rutherford.....	Sept. 2, 1905
2.....	Hon. A. L. Sifton.....	May 26, 1910
3.....	Hon. Charles Stewart.....	Oct. 30, 1917
4.....	Hon. Herbert Greenfield.....	Aug. 13, 1921

THE GREENFIELD (PRESENT) MINISTRY.

Office.	Name.	Date of Appointment.
Premier and Minister of Municipal Affairs.....	Hon. Herbert Greenfield.....	Aug. 13, 1921
Attorney General and Prov. Sec'y.....	Hon. J. E. Brownlee.....	Aug. 13, 1921
Minister of Public Works.....	Hon. A. Ross.....	Aug. 13, 1921
Minister of Agriculture and Minister of Health.....	Hon. George Hoadley.....	Aug. 13, 1921
Minister of Education.....	Hon. P. E. Baker.....	Aug. 13, 1921
Minister of Railways and Telephones.....	Hon. V. W. Smith.....	Aug. 13, 1921
Provincial Treasurer.....	Hon. R. G. Reid.....	Aug. 13, 1921
Minister without Portfolio.....	Hon. Mrs. Walter Parlby.....	Aug. 13, 1921

BRITISH COLUMBIA.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
J. W. Trutch.....	June 5, 1871	Sir Henri G. Joly de Lotbinière....	June 21, 1900
Albert Norton Richards.....	June 27, 1876	James Dunsmuir.....	May 11, 1905
Clement F. Cornwall.....	June 21, 1881	T. W. Patterson.....	Dec. 3, 1909
Hugh Nelson.....	Feb. 7, 1887	Sir Frank S. Barnard.....	Dec. 5, 1914
Edgar Dewdney.....	Nov. 1, 1892	Col. Edward G. Prior.....	Dec. 9, 1919
Thomas R. McInnes.....	Nov. 18, 1897	Walter C. Nichol.....	Dec. 24, 1920

11.—Lieutenant-Governors, Legislatures and Ministries of Provinces, 1867-1924—con

LEGISLATURES.

Legislature.	Number of Sessions.	Date of First Opening.	Date of Dissolution.
1st.....	4	Feb. 16, 1872.....	Aug. 30, 1875
2nd.....	3	Jan. 10, 1876.....	April 12, 1887
3rd.....	5	July 29, 1878.....	June 13, 1882
4th.....	4	Jan. 25, 1883.....	June 3, 1886
5th.....	4	Jan. 24, 1887.....	May 10, 1890
6th.....	4	Jan. 15, 1891.....	June 5, 1894
7th.....	4	Nov. 12, 1894.....	June 7, 1898
8th.....	2	Jan. 5, 1899.....	April 10, 1900
9th.....	4	July 19, 1900.....	June 16, 1902
10th.....	3	Nov. 26, 1903.....	Dec. 24, 1906
11th.....	3	Mar. 7, 1907.....	Oct. 20, 1909
12th.....	3	Jan. 20, 1910.....	Feb. 27, 1912
13th.....	4	Jan. 16, 1913.....	June 1, 1916
14th.....	4	Mar. 1, 1917.....	Oct. 23, 1920
15th.....	4	Feb. 28, 1921.....	May 10, 1924
16th.....	—	Nov. 3, 1924.....	—

MINISTRIES.

Ministry.	Premier.	Date of Formation.
1.....	Hon. J. F. McCreight.....	Dec. —, 1871
2.....	Hon. A. De Cosmos.....	Dec. 23, 1872
3.....	Hon. G. A. Walkem.....	Feb. 11, 1874
4.....	Hon. A. C. Elliot.....	Feb. 1, 1876
5.....	Hon. J. Walkem.....	June 26, 1878
6.....	Hon. R. Beaven.....	June 13, 1882
7.....	Hon. W. Smythe.....	Jan. 28, 1883
8.....	Hon. A. E. B. Davie.....	April 1, 1887
9.....	Hon. J. Robson.....	Aug. 3, 1889
10.....	Hon. T. Davie.....	July 2, 1892
11.....	Hon. J. H. Turner.....	Mar. 4, 1895
12.....	Hon. C. A. Sernlin.....	Aug. 12, 1898
13.....	Hon. Jos. Martin.....	Mar. 1, 1900
14.....	Hon. J. Dunsmuir.....	June 15, 1900
15.....	Hon. E. G. Prior.....	Nov. 21, 1902
16.....	Hon. R. McBride.....	June 1, 1903
17.....	Hon. Wm. J. Bowser.....	Dec. 15, 1915
18.....	Hon. Harlan Carey Brewster.....	Nov. 19, 1916
19.....	Hon. John Oliver.....	Mar. 6, 1918

THE OLIVER (PRESENT) MINISTRY.

Office.	Name.	Date of Appointment.
Premier and President of the Council. ...	Hon. John Oliver.....	Mar. 6, 1918
Minister of Finance, Education and Industries.....	Hon. J. D. McLean.....	Mar. 6, 1918
Attorney General and Minister of Labour	Hon. A. M. Manson.....	Jan. 28, 1922
Minister of Lands.....	Hon. T. D. Patullo.....	Mar. 6, 1918
Minister of Agriculture.....	Hon. E. D. Barrow.....	April 25, 1918
Provincial Secretary and Minister of Mines.....	Hon. William Sloan.....	Mar. 6, 1918
Minister of Public Works and Minister of Railways.....	Hon. W. H. Sutherland.....	Jan. 28, 1922

11.—Lieutenant-Governors, Legislatures and Ministries of Provinces, 1867-1924—concluded.

THE TERRITORIES.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
A. G. Archibald.....	May 10, 1870	Joseph Royal.....	July 1, 1888
Francis Goodschall Johnson.....	April 9, 1872	C. H. Mackintosh.....	Oct. 31, 1893
Alexander Morris.....	Dec. 2, 1872	M. C. Cameron.....	May 30, 1898
David Laird.....	Oct. 7, 1876	A. E. Forget.....	Oct. 11, 1898
Edgar Dewdney.....	Dec. 3, 1881	A. E. Forget.....	Mar. 30, 1904

¹Second term.

LEGISLATURES.

Legislature.	Number of Sessions.	Date of First Opening.	Date of Dissolution.
1st.....	3	Oct. 31, 1888.....	—
2nd.....	5	Dec. 10, 1891.....	Oct. 1, 1894
3rd.....	4	Aug. 29, 1895.....	Oct. 13, 1898
4th.....	4	April 4, 1899.....	April 26, 1902
5th.....	3	April 16, 1903.....	Aug. 31, 1905

NOTE.—In 1888 the districts of Alberta, Assiniboia, Athabaska and Saskatchewan, called the Northwest Territories, with their capital at Regina, were given local responsible government, and the old Northwest Council was replaced by the Northwest Legislature, which existed until Aug. 31, 1905. When the area approximately comprised within their limits was formed into the provinces of Alberta and Saskatchewan in 1905, these provinces were given systems of government similar to the other provinces of the Dominion. The remaining areas (the Yukon Territory and the provisional districts of Franklin, Keewatin and Mackenzie) are now administered by the Northwest Territories Branch of the Department of the Interior.

IV.—THE CANADIAN HIGH COMMISSIONER AND THE PROVINCIAL AGENTS-GENERAL.

The High Commissioner for Canada.—The policy of the early North American colonies, of maintaining in London accredited representatives for business and diplomatic purposes, was recognized in the eighteenth century as being a more satisfactory means of communication with the home government than that provided by occasional official visits or by correspondence. Edmund Burke, the noted British statesman, held the position of agent of the colony of New York for some years following 1771. Of the Canadian colonies, Nova Scotia was the first to adopt the plan, its legislature having appointed an agent in London in 1761. New Brunswick was similarly represented in 1786, Upper Canada as early as 1794, Lower Canada in 1812 and British Columbia in 1857. For some years after 1845, several of the colonies were represented in London by Crown Agents, appointed by the Secretary of State, and paid by the colonies themselves. This system, however, was of but short duration.

With the federation of the provinces in 1867, a new political entity was brought into existence, which could not avail itself of the services of the provincial agents. To overcome the inadequacy of the methods of communication between the Canadian and Imperial Governments (carried on at that time by correspondence between the Governor-General and the Secretary of State), the position of Canadian High

Commissioner was created in 1879 (See R.S.C., 1906, c. 15). This official is the representative of the Canadian Government in London, appointed by the Canadian Government and clothed with specific powers as a medium through which constant and confidential communications pass between the Governments of Great Britain and of Canada. The duties of the office were defined as follows:—

(1) To act as representative and resident Agent of the Dominion in the United Kingdom, and in that capacity to execute such powers and to perform such duties as may from time to time be conferred upon and assigned to him by the Governor in Council;

(2) To take the charge, supervision and control of the Immigration offices and agencies in the United Kingdom, under the Minister of Agriculture;

(3) To carry out such instructions as he may from time to time receive from the Governor in Council respecting the commercial, financial and general interests of the Dominion in the United Kingdom and elsewhere.

Sir Alexander Galt was the first Canadian High Commissioner, holding office from November, 1879, until May, 1883, when he was succeeded by Sir Charles Tupper. Lord Strathcona and Mount Royal was appointed in 1896, Sir George H. Perley in 1914, and the present incumbent, Hon. P. C. Larkin, in February, 1922.

The Agent of Canada in Paris.—A somewhat similar office is that of the Agent of Canada in Paris, first occupied by the Hon. Hector Fabre in 1882, whose duties were defined as: “to spread information in France and on the continent of Europe regarding Canada, its resources and its advantages as a field for emigration. That he will also solicit the attention of the capitalists of France to the minerals, timber and fish products of Canada and the promise which they offer in return for their development.”

The agent is also instructed “to conform to any instructions which he may receive from the High Commissioner for Canada in London regarding steps to be taken to improve the commercial relations between France and Canada, and to report monthly to the Secretary of State the efforts which he may have made to carry out the duties entrusted to him.”

Hon. Hector Fabre held the office until his death in 1910. His successor, Hon. Philippe Roy, was appointed in May, 1911, under the title “Commissaire Général du Canada en France.”

Agents-General.—The older provinces of Nova Scotia, New Brunswick, Quebec, Ontario and British Columbia still adhere to the practice of former days and are represented in London by Agents-General. These officials are appointed by the legislatures of the provinces under general authority given in the British North America Act and act for their Governments in capacities very similar to that of the High Commissioner, with the exception, perhaps, that their duties have tended to become of a business rather than a diplomatic nature.

IV.—POPULATION.

I.—GROWTH AND DISTRIBUTION OF POPULATION.

1.—Census Statistics of General Population.

Since the creation of the Dominion of Canada in 1867, decennial censuses have been taken on the *de jure* plan as of the dates April 2, 1871, April 4, 1881, April 5, 1891, April 1, 1901, June 1, 1911 and June 1, 1921. The population of Canada and its percentage distribution as on these dates, together with the absolute and percentage increases from decade to decade, is given in Tables 1 to 4 immediately following.

1.—Population of Canada by Provinces and Territories in the Census years 1871 to 1921.¹

Province or Territory.	1871.	1881.	1891.	1901.	1911.	1921.
Prince Edward Island.....	94,021	108,891	109,078	103,259	93,728	88,615
Nova Scotia.....	387,800	440,572	450,396	459,574	492,338	523,837
New Brunswick.....	285,594	321,233	321,263	331,120	351,889	387,876
Quebec.....	1,191,516	1,359,027	1,488,535	1,648,898	2,005,776 ²	2,361,199
Ontario.....	1,620,851	1,926,922	2,114,321	2,182,947	2,527,292 ²	2,933,662
Manitoba.....	25,228	62,260	152,506	255,211	461,394 ²	610,118
Saskatchewan.....	—	—	—	91,279	492,432	757,510
Alberta.....	—	—	—	73,022	374,295 ³	588,454
British Columbia.....	36,247	49,459	98,173	178,657	392,480	524,582
Yukon Territory.....	—	—	—	27,219	8,512	4,157
Northwest Territories ⁴	48,000	56,446	98,967	20,129	6,507 ²	7,988
Royal Canadian Navy.....	—	—	—	—	—	485
Total.....	3,689,257	4,324,810	4,833,239	5,371,315	7,206,643	8,788,483

2.—Percentage Distribution of Canadian Population by Provinces and Territories, 1871 to 1921.

Province or Territory.	1871.	1881.	1891.	1901.	1911.	1921.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Prince Edward Island.....	2.55	2.52	2.25	1.92	1.30	1.01
Nova Scotia.....	10.51	10.19	9.32	8.56	6.83	5.96
New Brunswick.....	7.74	7.43	6.65	6.16	4.88	4.41
Quebec.....	32.30	31.42	30.80	30.70	27.83	26.87
Ontario.....	43.94	44.56	43.74	40.64	35.07	33.38
Manitoba.....	0.68	1.44	3.16	4.75	6.40	6.94
Saskatchewan.....	—	—	—	1.70	6.84	8.62
Alberta.....	—	—	—	1.36	5.19	6.70
British Columbia.....	0.98	1.14	2.03	3.33	5.45	5.97
Yukon Territory.....	—	—	—	0.51	0.12	0.05
Northwest Territories ⁴	1.30	1.30	2.05	0.37	0.09	0.09
Royal Canadian Navy.....	—	—	—	—	—	—
	100.00	100.00	100.00	100.00	100.00	100.00

¹The population of the Prairie Provinces, according to the quinquennial census of 1916, is given on page 139. ²As corrected as a result of the Extension of Boundaries Act, 1912. ³As corrected by transfer of population of Fort Smith (368) to Northwest Territories. ⁴The decrease shown in the population of the Northwest Territories after 1891 is due to the separation therefrom of vast areas to form Alberta, Saskatchewan and the Yukon Territory, and to extend the boundaries of Quebec, Ontario and Manitoba.

3.—Population of Canada by Provinces and Territories in 1871 and 1921, and numerical increase in each decade from 1871 to 1921.

Province or Territory.	Population in 1871.	Increase in each decade from 1871 to 1921.					Population in 1921.	Increase, 1871 to 1921.
		1871 to 1881.	1881 to 1891.	1891 to 1901.	1901 to 1911.	1911 to 1921.		
Prince Edward I..	94,021	14,870	187	—5,819	—9,531	—5,113	88,615	—5,406
Nova Scotia.....	387,800	52,772	9,824	9,178	32,764	31,499	523,837	136,037
New Brunswick...	285,594	35,639	30	9,857	20,769	35,987	387,876	102,282
Quebec.....	1,191,516	167,511	129,508	160,363	356,878	355,423	2,361,199	1,169,683
Ontario.....	1,620,851	306,071	187,399	68,626	344,345	406,370	2,933,662	1,312,811
Manitoba.....	25,228	37,032	90,246	102,705	206,183	148,724	610,118	584,890
Saskatchewan.....	—	—	—	91,279	401,153	265,078	757,510	757,510
Alberta.....	—	—	—	73,022	301,273	214,159	588,454	588,454
British Columbia..	36,247	13,212	48,714	80,484	213,823	132,102	524,582	488,335
Yukon Territory..	—	—	—	27,219	—18,707	—4,355	4,157	4,157
Northwest Territories ¹	48,000	8,446	42,521	—78,838	—13,622	1,481	7,988	—40,012
Royal Canadian Navy.....	—	—	—	—	—	485	485	485
Canada.....	3,689,257	635,553	508,429	538,076	1,835,328	1,581,840	8,788,483	5,099,226

4.—Population of Canada by Provinces and Territories in 1871, and increase per cent by decades from 1871 to 1921.

Province or Territory.	Population in 1871.	Per cent increase by decades from 1871 to 1921.					Per cent increase in 50 years.
		1871 to 1881.	1881 to 1891.	1891 to 1901.	1901 to 1911.	1911 to 1921.	
Prince Edward Island.....	94,021	15.82	0.17	—5.33	—9.23	—5.46	—5.75
Nova Scotia.....	387,800	13.61	2.23	2.04	7.13	6.40	35.08
New Brunswick.....	285,594	12.48	0.01	3.07	6.27	10.23	35.82
Quebec.....	1,191,516	14.06	9.53	10.77	21.64	17.72	98.17
Ontario.....	1,620,851	18.88	9.73	3.25	15.77	16.08	80.99
Manitoba.....	25,228	146.79	144.95	67.34	80.79	32.23	2,318.42
Saskatchewan.....	—	—	—	—	439.48	53.83	—
Alberta.....	—	—	—	—	412.58	57.22	—
British Columbia.....	36,247	36.45	98.49	81.98	119.68	33.06	1,347.24
Yukon Territory.....	—	—	—	—	—68.73	—51.16	—
Northwest Territories ¹	48,000	17.60	75.33	—79.66	—67.67	22.76	—83.36
Canada.....	3,689,257	17.23	11.76	11.13	34.17	21.95	138.22

Early Censuses.—The credit of taking the first census of modern times belongs to Canada. The year was 1665, the census that of the colony of New France. Still earlier records of settlement at Port Royal (1605) and Quebec (1608) are extant; but the census of 1665 was a systematic "nominal" enumeration of the people, taken on the *de jure* principle, on a fixed date, showing age, sex, occupation, and conjugal and family condition. A supplementary enquiry in 1667 included the areas under cultivation and the numbers of sheep and cattle. When it is recalled that in Europe the first census dates only from the eighteenth century (those of France and England from the first year of the nineteenth), and that in the United States the census begins only with 1790, the achievement of the primitive St. Lawrence colony in instituting what is today one of the principal instruments of government may call for more than passing appreciation.

¹The decreases shown in the population of the Northwest Territories since 1891 are due to the separation therefrom of immense areas to form the provinces of Alberta and Saskatchewan and the Yukon Territory, as well as to extend the boundaries of the older provinces of Quebec, Ontario and Manitoba.

The census of 1665 (the results of which occupy 154 pages in manuscript, still to be seen in the Archives at Paris, with a transcript at Ottawa) showed some 3,215 souls. It was repeated at intervals more or less regularly for a hundred years. By 1685 the total had risen to 12,263, including 1,538 Indians collected in villages. By the end of the century it had passed 15,000, and this was doubled in the next twenty-five years. Not to present further details, it may be said that at the time of the cession (1763) the population of New France was about 70,000, whilst another 10,000 French (thinned to these proportions by the expulsion of the Acadians) were scattered through what is now Nova Scotia, New Brunswick and Prince Edward Island. The British population of Nova Scotia was at this time about 9,000.

After the cession, our chief sources of statistics for half a century and more are the reports of colonial governors—more or less sporadic—though censuses of the different sections under British rule were taken at irregular intervals. British settlement on a substantial scale in the Gulf Provinces and in Ontario dates only from the Loyalist movement which followed the American Revolution, at the end of which, *i.e.*, about the year of the Constitutional Act (1791), the population of Lower Canada was approximately 163,000, whilst the newly constituted province of Upper Canada under Lieutenant-Governor Simcoe numbered perhaps 15,000, and the addition of the Maritime colonies brought the total to well over 200,000. A decade later Canada began the nineteenth century with a population of probably not less than 250,000 or 260,000. Subsequent censuses gave the population of the different colonies as follows:—Upper Canada (1824) 150,069, (1840) 432,159; Lower Canada (1822) 427,465, (1844) 697,034; New Brunswick (1824) 74,176, (1840) 156,162; Nova Scotia (1817) 81,351, (1838) 202,575; Prince Edward Island (1822) 24,600, (1841) 47,042.

The policy of desultory census-taking was ended in 1847 by an Act of the Canadian Legislature creating a "Board of Registration and Statistics," with instructions "to collect statistics and adopt measures for disseminating or publishing the same," and providing also for a decennial census. The first census thereunder was taken in 1851, and as similar censuses were taken by New Brunswick and Nova Scotia in the same year, we have a regular measure of population growth in Canada over the past seventy years. The fifties saw a very rapid development, especially in Ontario, whilst the sixties showed only less substantial gains. In the years following Confederation, again, there was a spurt, the increase between 1871 and 1881 (which included several lean years towards the end) being 635,553, or 17·23 p.c. In neither of the last two decades of the nineteenth century, however, was this record equalled, either absolutely or relatively, the gains in each being under 550,000, or 12 p.c. With the end of the century the population of Canada had reached approximately five and a quarter millions, or twenty times that of 1800.

Twentieth Century Expansion.—It is within the confines of the present century that the most spectacular expansion of the Canadian population has taken place. The outstanding feature was, of course, the opening to settlement of the "last best West." The unorganized territories of British North America had been ceded to the Dominion soon after Confederation, and the West had been tapped and traversed by the Canadian Pacific Railway in the eighties and nineties. But though western population doubled with each of these decades, it was only with the launching of a large-scale immigration movement after 1900 that western settlement and production became a first-rate economic factor. Simultaneously an almost equally striking development occurred in the industrial centres of Eastern Canada, which formed the immediate basis for the move upon the West. At the back, of course,

was the heavy inflow of British and other capital—a total of two and a half billions of dollars within a dozen years—which went to finance the large constructive undertakings (chiefly railway and municipal) which characterized the movement, and which represented at bottom the traditional policy of England in search of cheap and abundant food for her workshop population. The years 1901 to 1911, in brief, form the *decas mirabilis* of Canadian expansion. The immigration movement just mentioned, which had previously run well under 50,000 per annum, rose rapidly to over five times that volume, eventually passing 400,000 in a single year. In the ten years 1901 to 1911 it totalled over 1,800,000, and though at least a third of these were lost (partly in the return to Europe of labour temporarily attracted by the railway and other developments in progress, and partly in the never-ceasing and natural “drag” of the United States upon a virile and less wealthy people), it formed the chief factor in the gain of 34 p.c. which the total population of Canada registered in that decade, and which was larger than the relative growth of any other country during the same period. The movement was continued and even intensified in the first three years of the second decade of the century, after which a recession set in to which the outbreak of the war gave a new and wholly unexpected turn. Nevertheless the decade which closed with the census of 1921 again showed over 1,800,000 immigrant arrivals in Canada, and though the proportionate loss of these was very heavy (probably as much as two-thirds), Canada’s relative gain for the decade was again among the largest in the world.

The Census of 1921.—According to the final results of the 1921 census, the total population of the Dominion on June 1, 1921, was 8,788,483, as compared with 7,206,643 on June 1, 1911, an increase of 1,581,840, or 21·95 p.c. in the decade, as compared with 34·17 p.c. during the decade from 1901 to 1911. Reduced as is the rate of increase during the past ten years, it is higher than the rate of increase in any other of the principal countries of the British Empire except Australia, where the rate was only slightly greater, and considerably higher than that of the United States.

The countries which comprise the British Empire, as also the United States, have on the whole suffered much less in actual loss of life from the war and its consequences than have the continental countries of Europe. None of them has actually declined in population during the period, as many continental European countries have done. Their percentage increases, however, have in almost all cases been lower than in the previous decade. Thus the population of England and Wales increased between 1911 and 1921 only from 36,070,492 to 37,885,242, or 4·93 p.c., as compared with an increase of 10·89 p.c. in the previous decade; Scotland, again, increased only from 4,760,904 to 4,882,288, or 2·5 p.c., as compared with 6·5 p.c. between 1901 and 1911.

Of the overseas Dominions, New Zealand increased from 1,008,468 to 1,218,270 or 20·8 p.c., as compared with 30·5 p.c., while the white population of South Africa increased from 1,276,242 to 1,522,442, or 19·3 p.c. On the other hand, the Commonwealth of Australia, the only Dominion to grow more rapidly in the second decade of the twentieth century than in the first, increased from 4,455,005 in 1911 to 5,436,794 in 1921, or 22·04 p.c., as compared with 18·05 p.c. The population of the continental United States increased between 1910 and 1920 from 91,972,266 to 105,710,620, an increase of 14·9 p.c., as compared with 21 p.c. in the preceding decade.

Considering now the Dominion of Canada itself, it becomes evident from Table 1 that in this country, as formerly in the United States, there is a distinct

movement of population from East to West. In the decade from 1911 to 1921 there occurred in the four western provinces an increase of population from 1,720,601 to 2,480,664 or 44·2 p.c., while the five eastern provinces increased from 5,471,023 to 6,295,189, an increase of 824,166 persons, which, though absolutely larger than the figure for the West, constitutes an increase of only 15 p.c. over the 1911 population. The same conclusion may be deduced from Table 2, which shows that while in 1871 only 2·96 p.c. and in 1881 only 3·83 p.c. of the population of the country dwelt west of the lake of the Woods, the percentage in 1891 was 7·24, in 1901, 12·02, in 1911, 24·09, and in 1921, 28·37. On the other hand, the three eastern Maritime provinces, which in 1871 contained 20·80 p.c. of the population of the Dominion, had in 1881, 20·14 p.c., in 1891, 18·22 p.c., in 1901, 16·64 p.c., in 1911, 13·01 p.c. and in 1921 only 11·38 p.c. of the population. Ontario and Quebec—the old pre-Confederation Province of Canada—still remain the chief centre of population, their population being in 1921, 60·25 p.c. of the total, as compared with 76·24 p.c. in 1871, 75·98 p.c. in 1881, 74·54 p.c. in 1891, 71·34 p.c. in 1901 and 62·90 p.c. in 1911. In other words, the net result of the half century has been that in 1921 only three-fifths of the population of the Dominion lived in these provinces, as compared with more than three-fourths in 1871.

In 1881 the "centre" of population east and west was in the county of Prescott, Ontario, not far from Caledonia village. In 1891 it had moved west to the vicinity of Ottawa, where it remained in 1901. In 1911 the county of Victoria, Ontario, contained the centre, and it is probably in Simcoe county, Ontario, at the present time.

The populations of the several provinces and electoral districts of Canada in 1921 are given by sex in Table 5.

5.—Area and Population of Canada by Provinces and Electoral Districts, 1921, 1911 and 1901.

Provinces and Districts.	Land area in sq. miles.	Population, 1921.				Population, 1911.	Population, 1901.
		Males.	Females.	Total.	Per sq. mile.		
Canada.....	3,603,909·00¹	4,529,945	4,258,538	8,788,483	2·44	7,206,643	5,371,315
Prince Edward Island....	2,184·36¹	44,887	43,728	88,615	40·56	93,728	103,259
King's.....	641·18	10,570	9,875	20,445	31·88	22,636	24,725
Prince.....	778·23	16,026	15,494	31,520	40·50	32,779	35,400
Queen's.....	764·95	18,291	18,359	36,650	47·91	38,313	45,134
Nova Scotia.....	21,068·00¹	266,472	257,365	523,837	24·86	492,338	459,574
Antigonish and Guysborough.....	2,212·00	13,988	13,110	27,098	12·25	29,010	31,937
Cape Breton North and Victoria.....	1,355·10	16,031	15,294	31,325	23·11	29,888	24,650
Cape Breton South and Richmond.....	1,210·90	39,759	36,603	76,362	63·06	66,625	48,602
Colchester.....	1,451·00	12,647	12,549	25,196	17·36	23,664	24,900
Cumberland.....	1,683·00	21,072	20,119	41,191	24·47	40,543	36,168
Digby and Annapolis.....	1,983·65	14,633	14,332	28,965	14·60	29,871	30,579
Halifax City and County.....	2,123·38	48,455	48,773	97,228	45·78	80,257	74,662
Hants.....	1,229·00	10,165	9,574	19,739	16·06	19,703	20,056
Inverness.....	1,408·75	12,421	11,387	23,808	16·90	25,571	24,353
King's.....	864·00	12,045	11,678	23,723	27·45	21,780	21,937
Lunenburg.....	1,202·00	17,295	16,447	33,742	28·07	33,260	32,389
Pictou.....	1,124·00	20,537	20,314	40,851	36·34	35,858	33,459
Shelburne and Queen's.....	2,022·48	11,913	11,522	23,435	11·58	24,211	24,423
Yarmouth and Clare.....	1,198·99	15,511	15,663	31,174	26·00	32,097	31,454

NOTE.—The land areas here given for the provinces and electoral districts are as measured by a planimeter on the map, and include the areas of small lakes and other waters which have not been measured.

¹By map measurement.

5.—Area and Population of Canada by Provinces and Electoral Districts, 1921, 1911 and 1901—continued.

Provinces and Districts.	Land area in sq. miles.	Population, 1921.				Population, 1911.	Population, 1901.
		Males.	Females.	Total.	Per sq. mile.		
New Brunswick	27,911-00¹	197,351	190,525	387,876	13-90	351,889	331,120
Charlotte.....	1,283-40	10,853	10,582	21,435	16-70	21,147	22,415
Cloucester.....	1,869-81	19,697	18,987	38,684	20-68	32,662	27,936
Kent.....	1,778-02	12,317	11,599	23,916	13-45	24,376	23,958
Northumberland.....	4,740-60	17,354	16,631	33,985	7-16	31,194	28,543
Restigouche and Madawaska.....	4,542-56	22,258	20,719	42,977	9-46	32,365	22,897
Royal.....	2,855-53	16,698	15,380	32,078	11-23	31,491	32,832
St. John City, County and Albert.....	1,302-88	33,754	35,339	69,093	53-03	63,263	62,684
Victoria and Carleton.....	3,402-64	17,706	16,194	33,900	9-96	32,990	30,446
Westmoreland.....	1,442-18	26,959	26,428	53,387	37-02	44,621	42,060
York and Sunbury.....	4,693-74	19,755	18,666	38,421	8-18	37,780	37,349
Quebec	690,865-00¹	1,180,028	1,181,171	2,361,199	3-42	2,005,776	1,648,898
Argenteuil.....	783-36	9,085	8,080	17,165	21-91	16,766	16,407
Bagot.....	346-14	9,003	9,032	18,035	52-10	18,206	18,181
Beauce.....	1,891-04	27,320	26,521	53,841	28-47	51,399	43,129
Beauharnois.....	147-03	9,805	10,083	19,888	135-26	20,802	21,732
Bellechasse.....	652-64	10,665	10,525	21,190	32-47	21,141	18,706
Berthier.....	2,192-74	9,927	9,890	19,817	9-04	19,872	19,980
Bonaventure.....	3,463-61	14,879	14,213	29,092	8-40	28,110	24,495
Brome.....	488-15	7,024	6,447	13,471	27-60	13,216	13,397
Chamby and Verchères..	337-00	17,285	17,358	34,643	102-80	28,715	24,318
Champlain.....	1,497-95	24,760	23,249	48,009	32-05	39,824	32,015
Charlevoix-Montmorency	4,303-09	14,642	14,232	28,874	6-71	27,972	25,813
Châteauguay-Huntingdon	626-52	13,582	13,149	26,731	42-67	26,562	27,562
Chicoutimi-Saguenay.....	492,140-74 ²	47,182	43,427	90,609	0-18	65,888	48,291
Compton.....	1,439-04	16,945	15,340	32,285	22-44	29,630	26,460
Dorchester.....	941-60	15,038	13,916	28,954	30-75	25,096	21,007
Drummond & Arthabaska	1,197-82	22,816	22,007	44,823	37-42	41,590	38,999
Gaspé.....	4,551-47	20,945	19,430	40,375	8-87	35,001	30,683
Georges-Etienne Cartier..	—	26,746	28,054	54,800	—	51,937	53,673
Hochelaga.....	—	35,828	37,698	73,526	—	44,884	14,193
Hull.....	1,023-18	22,020	21,521	43,541	42-55	37,917	33,851
Jacques Cartier.....	86-94	44,178	45,119	89,297	1,027-11	56,555	21,966
Joliette.....	3,013-50	12,700	13,213	25,913	8-60	23,911	22,255
Kamouraska.....	1,037-50	11,137	10,877	22,014	21-22	20,888	19,099
Labelle.....	2,948-80	18,931	16,996	35,927	12-18	30,115	22,291
Laprairie and Napierville	319-20	10,352	9,713	20,065	62-86	19,335	19,633
L'Assomption-Montcalm..	4,448-40	14,225	14,093	28,318	6-37	28,506	26,996
Laurier-Outremont.....	—	34,201	37,846	72,047	—	44,264	13,237
Laval-Two Mountains....	378-12	14,459	13,855	28,314	74-88	25,275	24,686
Lévis.....	271-83	16,523	16,800	33,323	122-59	28,913	26,210
L'Islet.....	772-80	9,097	8,762	17,859	23-11	16,435	14,439
Lotbinière.....	726-40	10,992	10,845	21,837	30-06	22,158	20,689
Maisonneuve.....	58-10	32,298	32,635	64,933	1,117-61	33,796	12,402
Maskinongé.....	2,940-00	8,609	8,336	16,945	5-76	16,509	15,813
Matane.....	3,495-67	18,795	17,508	36,303	10-39	27,539	18,521
Mégantic.....	780-16	17,161	16,472	33,633	43-11	31,314	23,878
Missisquoi.....	375-21	8,887	8,822	17,709	47-20	17,466	17,339
Montmagny.....	630-13	11,341	10,656	21,997	34-91	17,356	14,757
Nicolet.....	626-07	14,841	14,854	29,695	47-43	30,055	27,209
Pontiac.....	126,437-19 ³	25,169	21,032	46,201	0-36	31,479	28,127
Portneuf.....	6,722-91	17,350	17,102	34,452	5-12	30,260	24,176
Quebec County.....	2,799-59	15,234	15,896	31,130	11-12	28,046	24,381
Quebec East.....	2-20	17,836	20,494	38,330	17,422-73	30,922	28,645
Quebec South.....	3-59	12,239	15,467	27,706	7,717-55	24,163	21,833
Quebec West.....	116-66	18,349	19,644	37,993	325-67	30,506	24,897
Richelieu.....	193-10	9,289	9,475	18,764	97-17	19,810	18,576
Richmond and Wolfe....	1,224-32	21,693	20,555	42,248	34-51	39,491	34,137
Rimouski.....	2,089-44	13,865	13,655	27,520	13-17	23,951	21,636
Ste. Anne.....	—	26,884	26,165	53,049	—	41,544	41,225
St. Antoine.....	—	14,823	17,571	32,394	—	34,794	47,653
St. Denis.....	—	38,276	40,644	78,920	—	45,141	10,391
St. Hyacinthe-Rouville..	520-58	17,910	18,844	36,754	70-60	35,473	34,950

¹By map measurement. organized parts.²Includes part added by Extension of Boundaries Act, 1912.³Includes un-

5.—Area and Population of Canada by Provinces and Electoral Districts, 1921, 1911 and 1901—continued.

Provinces and Districts.	Land area in sq. miles.	Population, 1921.				Population, 1911.	Population, 1901.
		Males.	Females.	Total.	Per sq. mile.		
Quebec—concluded.							
St. James.....	—	20,462	21,981	42,443	—	44,057	42,618
St. Johns and Iberville.....	403.02	11,943	11,575	23,518	58.35	21,882	20,679
St. Lawrence-St. George.....	—	18,150	18,762	36,912	—	38,883	21,889
Ste. Marie.....	—	30,842	33,133	63,975	—	62,521	40,631
Shefford.....	567.20	12,970	12,674	25,644	45.21	23,976	23,628
Sherbrooke.....	237.59	15,148	15,638	30,786	129.58	23,211	18,426
Stanstead.....	432.47	11,714	11,666	23,380	54.06	20,765	18,998
Témiscouata.....	1,806.18	22,638	21,672	44,310	24.53	36,430	29,185
Terrebonne.....	781.82	16,972	16,936	33,908	43.37	29,018	26,816
Three Rivers and St. Maurice.....	2,568.05	25,438	25,407	50,845	19.80	36,153	29,311
Vaudreuil-Soulanges.....	336.75	10,969	10,651	21,620	64.20	20,439	20,373
Westmount-St. Henri.....	—	29,785	33,124	62,909	—	56,088	40,960
Wright.....	2,297.27	11,424	10,426	21,850	9.51	21,171	19,589
Yamaska.....	393.12	9,432	9,408	18,840	47.02	20,387	21,506
Ontario.....	365,880.00¹	1,481,890	1,451,772	2,933,662	8.02	2,527,292	2,182,947
Algoma East.....	20,678.17	22,815	17,803	40,618	1.96	37,699	25,211
Algoma West.....	22,153.98	18,332	15,344	33,676	1.52	28,752	17,894
Brant.....	334.23	10,180	9,905	20,085	60.09	19,259	18,273
Brantford.....	86.86	16,364	16,928	33,292	383.28	26,617	19,867
Bruce North.....	950.95	10,684	10,188	20,872	21.95	23,783	27,424
Bruce South.....	699.46	11,904	11,509	23,413	33.47	26,249	31,596
Carleton.....	650.87	16,751	15,922	32,673	50.19	24,417	22,880
Dufferin.....	556.64	7,996	7,419	15,415	27.69	17,740	21,036
Dundas.....	576.11	12,338	12,050	24,388	42.63	25,973	28,350
Durham.....	628.98	12,457	12,172	24,629	39.16	26,411	27,570
Elgin East.....	362.52	8,872	8,434	17,306	47.74	17,597	17,901
Elgin West.....	357.58	13,860	13,818	27,678	77.40	26,715	25,685
Essex North.....	239.27	37,111	34,039	71,150	297.36	38,006	28,789
Essex South.....	467.53	16,129	15,296	31,425	67.21	29,541	29,955
Fort William and Rainy River.....	12,784.68	21,573	18,088	39,661	3.10	32,158	18,461
Frontenac.....	1,595.91	10,672	9,718	20,390	12.77	21,944	24,746
Glengarry and Stormont.....	697.33	19,528	19,045	38,573	55.31	38,226	40,580
Grenville.....	462.83	8,266	8,378	16,644	35.96	17,545	21,021
Grey North.....	669.79	15,395	15,272	30,667	45.78	33,957	33,003
Grey Southeast.....	1,038.03	14,610	13,774	28,384	27.34	31,934	36,587
Haldimand.....	488.13	10,889	10,398	21,287	43.60	21,562	21,233
Halton.....	362.69	12,748	12,151	24,899	68.65	22,208	19,545
Hamilton East.....	2.69	24,983	24,837	49,820	18,520.44	39,793	24,000
Hamilton West.....	3.54	18,893	20,405	39,298	11,101.11	37,279	28,634
Hastings East.....	1,291.41	11,997	11,075	23,072	17.86	24,978	27,943
Hastings West.....	1,031.67	17,130	17,321	34,451	33.39	30,825	31,348
Huron North.....	660.11	11,657	11,883	23,540	35.66	26,886	30,966
Huron South.....	635.31	11,692	11,856	23,548	37.06	26,097	30,854
Kent.....	818.50	26,646	25,493	52,139	63.70	49,391	49,673
Kingston.....	3.54	11,666	12,438	24,104	6,809.03	20,660	19,788
Lambton East.....	647.81	13,084	12,717	25,801	39.82	28,827	34,440
Lambton West.....	675.57	16,976	15,912	32,888	57.13	29,109	29,423
Lanark.....	1,137.99	16,332	16,661	32,993	28.99	34,375	37,232
Leeds.....	899.68	17,338	17,571	34,909	38.80	36,753	37,975
Lennox and Addington.....	1,169.77	9,638	9,356	18,994	16.23	20,386	23,346
Lincoln.....	332.41	24,874	23,751	48,625	146.28	35,429	30,552
London.....	6.65	25,364	28,474	53,838	8,095.94	46,300	37,976
Middlesex East.....	481.00	14,581	13,413	27,994	58.18	23,465	23,393
Middlesex West.....	752.14	12,678	12,355	25,033	33.28	27,300	31,387
Muskoka.....	1,585.38	10,153	9,286	19,439	12.26	21,233	20,971
Nipissing.....	11,157.32	31,508	27,057	58,565	5.25	43,679	24,931
Norfolk.....	634.26	13,305	13,061	26,366	41.56	27,110	29,147
Northumberland.....	704.29	15,012	15,500	30,512	43.32	32,892	33,550
Ontario North.....	504.82	7,875	7,545	15,420	30.54	17,141	18,390
Ontario South.....	347.69	15,762	15,312	31,074	89.37	32,865	22,018
Ottawa.....	4.75	43,232	50,508	93,740	19,734.74	77,182	59,140
Oxford North.....	410.56	12,232	12,295	24,527	59.74	25,077	25,644
Oxford South.....	353.99	11,133	11,102	22,235	62.81	22,294	22,760

¹By map measurement.

5.—Area and Population of Canada by Provinces and Electoral Districts, 1921, 1911 and 1901—continued.

Provinces and Districts.	Land area in sq. miles.	Population, 1921.				Popula- tion, 1911.	Popula- tion, 1901.
		Males.	Females.	Total.	Per sq. mile.		
Ontario—concluded.							
Parkdale.....	—	38,820	41,960	80,780	—	59,609	22,303
Parry Sound.....	4,336-00	14,716	12,306	27,022	6.23	26,547	24,936
Peel.....	468-51	12,371	11,525	23,896	51.01	22,102	21,475
Perth North.....	429-77	16,223	16,238	32,461	75.53	30,235	29,256
Perth South.....	409-81	9,315	9,067	18,382	44.85	18,947	20,615
Peterborough East.....	891-38	7,101	6,615	13,716	15.38	15,499	16,291
Peterborough West.....	553-81	14,382	14,936	29,318	52.93	26,151	20,704
Port Arthur and Kenora..	207,570-90	24,136	19,164	43,300	0.21	39,109	10,526
Prescott.....	494-29	13,429	13,049	26,478	53.56	26,968	27,035
Prince Edward.....	390-40	8,288	8,518	16,806	43.04	17,150	17,864
Renfrew North.....	1,057-81	12,339	11,617	23,956	22.64	23,617	24,556
Renfrew South.....	1,644-95	13,765	13,296	27,061	16.45	27,852	27,676
Russell.....	698-68	22,084	21,329	43,413	62.13	39,434	35,166
Simcoe East.....	529-39	18,888	18,234	37,122	70.12	35,294	29,845
Simcoe North.....	574-88	11,227	10,873	22,100	38.44	24,699	26,071
Simcoe South.....	558-61	12,655	12,155	24,810	44.41	25,060	26,399
Timiskaming.....	46,211-00	30,219	21,349	51,568	1.11	37,380	3,378
Toronto Centre.....	—	25,326	26,442	51,768	—	54,792	45,888
Toronto East.....	—	31,096	33,729	64,825	—	53,712	36,763
Toronto North.....	—	32,378	40,100	72,478	—	51,318	20,766
Toronto South.....	—	19,335	18,261	37,596	—	43,956	38,108
Toronto West.....	—	32,717	35,680	68,397	—	57,804	41,069
Victoria.....	2,834-23	17,621	16,374	33,995	11.99	36,499	38,511
Waterloo North.....	273-20	20,591	21,107	41,698	152.62	33,619	27,124
Waterloo South.....	242-63	16,440	17,128	33,568	138.35	28,988	25,470
Welland.....	387-27	36,360	30,308	66,668	172.14	42,163	31,588
Wellington North.....	580-46	10,182	9,651	19,833	34.16	22,292	26,120
Wellington South.....	438-88	17,161	17,166	34,327	78.21	32,200	29,526
Wentworth.....	451-97	32,574	31,875	64,449	142.59	34,634	26,818
York East.....	64-52	38,163	39,787	77,950	1,208.15	32,864	8,478
York North.....	430-56	11,840	11,296	23,136	53.73	22,415	22,419
York South.....	202-28	49,572	50,482	100,054	494.63	31,933	18,964
York West.....	158-52	35,361	35,320	70,681	445.88	35,831	17,905
Manitoba.							
Brandon.....	231,926-00 ¹	320,567	289,551	610,118	2.63	461,394	255,211
Dauphin.....	2,914-06	21,315	18,868	40,183	13.78	39,734	25,047
Lisgar.....	5,468-75	19,254	16,228	35,482	6.49	23,358	12,617
Macdonald.....	1,979-96	15,652	14,269	29,921	15.11	25,978	26,899
Marquette.....	2,390-90	12,936	10,888	23,824	9.96	20,802	17,324
Neepawa.....	5,454-24	22,433	18,821	41,254	7.56	32,384	20,435
Neepawa.....	3,491-53	15,464	12,892	28,356	8.12	23,923	19,140
Nelson.....	173,975-18	10,705	9,101	19,806	0.11	11,737	2,359
Portage la Prairie.....	1,710-22	12,027	10,227	22,254	13.01	22,059	14,969
Provencher.....	4,261-36	15,819	13,489	29,308	6.87	24,276	14,129
Selkirk.....	10,689-84	29,639	25,756	55,395	5.18	32,653	16,443
Souris.....	3,586-35	14,341	12,069	26,410	7.36	27,133	22,634
Springfield.....	15,944-15	30,935	27,935	58,870	3.69	37,747	20,290
Winnipeg Centre.....	59-46	39,125	37,345	76,470	3,347.71	58,903	42,925
Winnipeg North.....		32,060	30,897	62,957		45,682	
Winnipeg South.....		28,862	30,766	59,628		35,525	
Saskatchewan.							
Assiniboia.....	243,381-00 ¹	413,700	343,810	757,510	3.12	492,432	91,279
Battleford.....	5,850-86	18,831	15,958	34,789	5.95	31,975	9,053
Humboldt.....	6,651-96	18,561	15,080	33,641	5.06	21,667	1,355
Kinderley.....	8,320-95	30,300	24,925	55,225	6.63	36,617	1,652
Last Mountain.....	11,264-30	25,758	19,014	44,772	3.97	22,299	31
Mackenzie.....	7,085-51	27,731	22,324	50,055	7.06	33,093	1,575
Maple Creek.....	5,856-34	29,907	25,722	55,629	9.49	36,940	11,984
Moos-e-Jaw.....	15,149-09	31,318	24,746	56,064	3.70	19,730	1,473
North Battleford.....	5,591-12	27,376	23,027	50,403	9.01	31,552	3,725
Prince Albert.....	72,500-00	26,121	21,260	47,381	0.66	24,330	4,579
Qu'Appelle.....	76,571-00	31,054	25,775	56,829	0.74	35,839	16,644
Regina.....	4,458-06	18,819	16,017	34,836	7.81	30,470	17,133
Salcoats.....	2,063-25	26,395	23,582	49,977	24.22	44,202	6,581
Salcoats.....	4,554-69	23,621	20,174	43,795	9.62	32,313	10,874

¹By map measurement

5.—Area and Population of Canada by Provinces and Electoral Districts, 1921, 1911 and 1901—concluded.

Provinces and Districts.	Land area in sq. miles.	Population, 1921.				Population, 1911.	Population, 1901.
		Males.	Females.	Total.	Per sq. mile.		
Saskatchewan—concluded.							
Saskatoon.....	3,453.38	28,862	26,289	55,151	15.97	31,633	2,964
Swift Current.....	7,958.48	29,220	24,055	53,275	6.69	28,691	484
Weyburn.....	6,051.89	19,826	15,862	35,688	5.89	31,081	1,172
Alberta	252,925.00¹	324,208	264,246	588,454	2.33	374,295	73,022
Battle River.....	13,191.90	27,483	21,690	49,173	3.73	26,352	597
Bow River.....	11,259.86	32,460	22,896	55,356	4.92	27,304	1,565
Calgary East.....	2,033.59	23,819	21,176	44,995	22.13	35,163	5,526
Calgary West.....	4,630.00	22,733	21,608	44,341	9.58	30,023	3,546
Edmonton East.....	57,172.40	30,719	25,829	56,548	0.99	30,926	7,685
Edmonton West.....	112,497.43	41,947	32,320	74,267	0.66	35,386	7,641
Lethbridge.....	5,498.33	21,072	16,627	37,699	6.86	29,487	5,995
Macleod.....	9,017.00	18,976	15,032	34,008	3.77	30,779	8,228
Medicine Hat.....	12,497.00	23,982	19,197	43,179	3.46	24,697	3,185
Red Deer.....	13,431.84	27,426	22,203	49,629	3.69	37,507	7,568
Strathcona.....	5,309.09	22,682	19,838	42,520	8.01	28,355	12,635
Victoria.....	6,386.45	30,909	25,830	56,739	8.88	38,316	8,851
British Columbia	353,416.00¹	293,409	231,173	524,582	1.48	392,480	178,657
Burrard.....	620.79	34,387	35,535	69,922	112.63	48,493	1,267
Cariboo.....	164,693.50	23,934	15,900	39,834	0.24	26,541	29,152*
Comox-Alberni.....	18,227.46	20,665	11,344	32,009	1.75	19,739	8,444
Fraser Valley.....	304.95	17,054	11,757	28,811	94.48	22,645	8,219
Kootenay East.....	13,367.11	11,983	7,154	19,137	1.43	22,466	8,446
Kootenay West.....	12,979.11	16,880	13,622	30,502	2.35	28,373	23,516
Nanaimo.....	2,717.00	26,079	21,931	48,010	17.67	31,878	22,293
New Westminster.....	6,102.41	25,059	20,923	45,982	7.54	29,384	14,855
Skeena.....	123,896.14	19,083	9,851	28,934	0.23	22,685	13,013
Vancouver Centre.....	5.73	34,867	26,012	60,879	10,624.60	60,104	27,010
Vancouver South.....	32.24	23,439	22,698	46,137	1,431.04	20,446	1,520
Victoria.....	7.50	20,107	18,620	38,727	5,163.60	31,660	20,919
Yale.....	10,462.06	19,872	15,826	35,698	3.41	28,066	a
Yukon.....	206,427.00	2,819	1,338	4,157	0.02	8,512	27,219
Northwest Territories.....	1,207,926.00	4,129	3,859	7,988	0.007	6,507	20,129
Royal Canadian Navy.....	—	485	—	485	—	—	—
Canada	3,603,999.00¹	4,529,945	4,258,538	8,788,483	2.44	7,206,643	5,371,315

¹By map measurement for provinces and electoral districts.

²Includes Yale District.

³Included in Cariboo District.

Density of Population.—The density of population in 1921 (*i.e.*, the number of persons per square mile of the land area), is shown by provinces and for the country as a whole in Table 6. Generally speaking, the density of population decreases as one travels westward, but the enormous area of the province of Quebec reduces the density of its population to the low figure of 3.42. As among the nine provinces, the density of population is greatest in Prince Edward Island and least in British Columbia.

6.—Density of Population in Canada, by Provinces and Territories, 1911 and 1921.

Provinces.	1911.	1921.	Provinces.	1911.	1921.
Prince Edward Island.....	42.91	40.56	Saskatchewan.....	2.02	3.12
Nova Scotia.....	23.37	24.86	Alberta.....	1.48	2.33
New Brunswick.....	12.61	13.90	British Columbia.....	1.11	1.43
Quebec.....	2.90	3.42	Yukon Territory.....	0.04	0.02
Ontario.....	6.91	8.02	Northwest Territories.....	—	—
Manitoba.....	1.99	2.63			
			Canada	2.00	2.44

Elements of growth.—The lack of comprehensive and comparable vital statistics for the whole of Canada, together with the lack of statistics of emigration makes it difficult to determine how far the growth of population is due to natural increase and how far to immigration. The following estimate (Table 7) may, however, be of interest. During the last decade, in addition to some 60,000 Canadians who died overseas and nearly 20,000 who took their discharge in the United Kingdom, there were also great numbers of residents of Canada—most of them recent immigrants—who left Canada to join the forces of the Mother Country and of her allies in the Great War and did not return. The estimated figure given for emigration in the decade 1911–1921 may therefore be regarded as of a distinctly abnormal character.

7.—Movement of Population, including estimated Natural Increase, recorded Immigration, and estimated Emigration, for the intercensal periods 1901–1911 and 1911–1921.

Decades and Items.	No.
Decade 1901–1911—	
Population, Census of April 1, 1901.....	5,371,315
Natural increase (1901–1911), estimated.....	853,566
Immigration (April 1, 1901 to May 31, 1911).....	1,847,651
Total.....	8,072,532
Population, Census of June 1, 1911.....	7,206,643
Emigration (April 1, 1901 to May 31, 1911), estimated.....	865,889
Decade 1911–1921—	
Population, Census of June 1, 1911.....	7,206,643
Natural increase (1911–1921), estimated.....	1,150,659
Immigration (June 1, 1911 to May 31, 1921).....	1,728,921
Total.....	10,086,223
Population, Census of June 1, 1921.....	8,788,483
Emigration (June 1, 1911 to June 1, 1921), estimated.....	1,297,740
Net gain in population, 1901–1911.....	1,835,328
Net gain in population, 1911–1921.....	1,581,840

¹This figure includes also the 60,000 Canadian lives lost at the front and the soldiers (about 20,000) enlisting in the Canadian forces and receiving their discharge in the United Kingdom.

2.—Sex Distribution.

Throughout the older countries of the world there is usually found an excess of female over male population, more especially as in most of these countries the census is taken on a *de facto* instead of, as in Canada, on a *de jure* basis. The causes of this excess of female population are: (1) the normally higher rate of mortality among males; (2) the greater number of males who travel; (3) the effects of war; (4) the employment of males in the army, navy and merchant marine; and (5) the preponderance of males among emigrants. In the newer countries of the world, however, the last of these causes results in a general excess of male over female population. Both of these phenomena are exemplified in Table 10.

In Canada there has been such an excess of male population from the commencement of its history, the first census of 1665 showing 2,034 males to only 1,181 females. As the colony increased in numbers, the disproportion between the sexes became smaller, more especially since the French-Canadian population after about 1680 was not reinforced by immigration from the old world. In 1784, when the English-speaking immigration to Canada for purposes of settlement was com-

mencing, there were 54,064 males and 50,759 females in the country. At the middle of the nineteenth century there were 449,967 males to 440,294 females in Lower Canada, and 499,067 males to 452,937 females in the more newly-settled Upper Canada, and since Confederation the same phenomenon of considerable excess of males has occurred throughout the growing Northwest. The great immigration of the first decade of the present century resulted in raising what is called the "masculinity" of the Canadian population (*i.e.*, the excess of males over females per 100 of population) to the highest point in recent history, *viz.*, 6.07 in 1911. The great war, however, both checked immigration and took some 60,000 young Canadian male lives as its toll, with the result that at the census of 1921 the masculinity of our population was only 3 p.c.—515 males to 485 females per 1,000 of population. Thus masculinity in the country as a whole and also in all the provinces except Prince Edward Island, has been since 1911 on the decline—a phenomenon which must be regarded with satisfaction, since an approximation to equality in the numbers of the sexes is desirable both in the interests of morality and also as promotive of the birth rate (an important consideration in a country where the density of population is only 2.44 to the square mile). In Table 8 statistics are presented showing the number of males and females in each of the provinces and territories at each census since 1871, while Table 9 shows the proportions of the sexes and excess of males per 1,000 of population. The statistics of Table 10 show the position of Canada among other countries of the world in regard to masculinity.

8.—Sex Distribution of the People of Canada, by Provinces, 1871-1921.

Provinces.	1871.		1881.		1891.	
	Male.	Female.	Male.	Female.	Male.	Female.
Prince Edward Island.....	47,121	46,900	54,729	54,162	54,881	54,197
Nova Scotia.....	193,792	194,008	220,538	220,034	227,093	223,303
New Brunswick.....	145,888	139,706	164,119	157,114	163,739	157,524
Quebec.....	596,041	595,475	678,175	680,852	744,141	744,394
Ontario.....	828,590	792,261	978,554	948,368	1,069,487	1,044,834
Manitoba.....	12,864	12,364	35,123	27,137	84,342	68,164
Saskatchewan.....	—	—	—	—	—	—
Alberta.....	—	—	—	—	—	—
British Columbia.....	20,694	15,553	29,503	19,956	63,003	35,170
Yukon Territory.....	—	—	—	—	—	—
Northwest Territories.....	24,274	23,726	28,113	28,333	53,785	45,182
Canada.....	1,869,264	1,819,993	2,188,854	2,135,956	2,460,471	2,372,768

Provinces.	1901.		1911.		1921.	
	Male.	Female.	Male.	Female.	Male.	Female.
Prince Edward Island.....	51,959	51,300	47,069	46,659	44,887	42,728
Nova Scotia.....	233,642	225,932	251,019	241,319	266,472	257,365
New Brunswick.....	168,639	162,481	179,867	172,022	197,351	190,525
Quebec.....	824,454	824,444	1,012,815	992,961	1,180,028	1,181,171
Ontario.....	1,096,640	1,086,307	1,301,272	1,226,020	1,481,890	1,451,772
Manitoba.....	138,504	116,707	252,954	208,440	320,567	289,551
Saskatchewan.....	49,431	41,848	291,730	200,702	413,700	343,810
Alberta.....	41,019	32,003	223,792	150,503	324,208	264,246
British Columbia.....	114,160	64,497	251,619	140,861	293,409	231,173
Yukon Territory.....	23,084	4,135	6,508	2,004	2,819	1,338
Northwest Territories.....	10,176	9,953	3,350	3,157	4,129	3,859
Royal Canadian Navy.....	—	—	—	—	485	—
Canada.....	2,751,708	2,619,607	3,821,995	3,384,648	4,529,945	4,258,538

**9.—Proportion of the Sexes per 1,000 of Population in Canada, by Provinces,
1871-1921.**

Provinces.	1871.			1881.			1891.		
	Males.	Fe- males.	Excess of Males over Females.	Males.	Fe- males.	Excess of Males over Females.	Males.	Fe- males.	Excess of Males over Females.
Prince Edward Island.....	501	499	2	503	497	6	504	496	8
Nova Scotia.....	500	500	—	501	499	2	504	496	8
New Brunswick.....	511	489	22	511	489	22	510	490	20
Quebec.....	500	500	—	499	501	—2	500	500	—
Ontario.....	511	489	22	508	492	16	506	494	12
Manitoba.....	510	490	20	564	436	128	553	447	106
Saskatchewan.....	—	—	—	—	—	—	—	—	—
Alberta.....	—	—	—	—	—	—	—	—	—
British Columbia.....	571	429	142	597	403	194	642	358	284
Yukon Territory.....	—	—	—	—	—	—	—	—	—
Northwest Territories.....	506	494	12	498	502	—4	543	457	86
Canada.....	507	493	14	506	494	12	509	491	18

Provinces.	1901.			1911.			1921.		
	Males.	Fe- males.	Excess of Males over Females.	Males.	Fe- males.	Excess of Males over Females.	Males.	Fe- males.	Excess of Males over Females.
Prince Edward Island.....	503	497	6	502	498	4	507	493	14
Nova Scotia.....	508	492	16	510	490	20	509	491	18
New Brunswick.....	509	491	18	511	489	22	509	491	18
Quebec.....	500	500	—	505	495	10	500	500	—
Ontario.....	502	498	4	515	485	30	505	495	10
Manitoba.....	543	457	86	548	452	96	525	475	50
Saskatchewan.....	541	459	82	592	408	184	546	454	92
Alberta.....	562	438	124	598	402	196	551	449	102
British Columbia.....	639	361	278	641	359	282	559	441	118
Yukon Territory.....	848	152	696	765	235	530	678	322	356
Northwest Territories.....	506	494	12	515	485	30	517	483	34
Royal Canadian Navy.....	—	—	—	—	—	—	1,000	—	1,000
Canada.....	512	488	24	530	470	60	515	485	30

10.—Masculinity of the Population of Various Countries.

Country.	Year.	Excess of males over females in each 100 population.	Country.	Year.	Excess of males over females in each 100 population.
Argentine Republic.....	1918	7.27	Spain.....	1920	—1.34
Canada.....	1921	3.00	Belgium.....	1920	—1.59
Union of South Africa ¹	1921	2.92	Switzerland.....	1910	—1.62
India.....	1921	2.84	France.....	1911	—1.74
New Zealand.....	1921	2.26	Italy.....	1911	—1.81
United States of America.....	1920	1.98	Denmark.....	1921	—2.44
Australia.....	1921	1.58	Norway.....	1920	—2.60
Ireland.....	1919	1.08	Scotland.....	1921	—3.79
Rumania.....	1915	0.75	Austria.....	1920	—4.24
Japan.....	1920	0.22	Prussia.....	1919	—4.49
Bulgaria.....	1921	0.04	England and Wales.....	1921	—4.54
Chile.....	1920	—0.57	Poland.....	1920	—4.66
Netherlands.....	1920	—0.65	German Empire.....	1919	—4.78
Greece.....	1920	—0.66	Russia.....	1920	—4.78
Sweden.....	1920	—1.16	Portugal.....	1911	—5.08
Finland.....	1920	—1.31			

¹ White population only.

NOTE.—The minus sign (—) indicates a deficiency of males.

3.—Conjugal Condition.

In Table 11 are given in summary form, together with percentages, the statistics of the conjugal condition of the population, as single, married, widowed, divorced, legally separated and not given, for the six censuses since 1871. Especially notable is the larger percentage of married in the more recent years. This is mainly attributable to the larger percentage of adults to total population in our own time. Noteworthy also is the larger percentage of divorced and legally separated in recent years. The reader should also consult in the index the heading "Divorces in Canada, 1901-1923," for the number of divorces granted in each year since 1900.

The conjugal condition of the 1921 population is shown by provinces in Table 12 and by age-groups in Table 13.

11.—Conjugal Condition of the Population by numbers and percentages, as shown by Censuses of 1871, 1881, 1891, 1901, 1911 and 1921.

Sex.	Single.	Married.	Widowed.	Divorced.	Legally Separated.	Not Given.	Total.
1871—							
Male.....	1,183,787	543,037	37,487	—	—	—	1,764,311
Female.....	1,099,216	542,339	79,895	—	—	—	1,721,450
1881—							
Male.....	1,447,415	690,544	50,895	—	—	—	2,188,854
Female.....	1,336,981	689,540	109,435	—	—	—	2,135,956
1891—							
Male.....	1,601,541	796,153	62,777	—	—	—	2,460,471
Female.....	1,451,851	791,902	129,015	—	—	—	2,372,768
1901—							
Male.....	1,748,582	928,952	73,837	337	—	—	2,751,708
Female.....	1,564,011	904,091	151,181	324	—	—	2,619,607
1911—							
Male.....	2,369,766	1,331,853	89,154	839	1,286	29,097	3,821,995
Female.....	1,941,886	1,251,468	179,656	691	1,584	9,363	3,384,648
1921—							
Male.....	2,698,754	1,698,395	119,708	3,670	1	9,418	4,529,945
Female.....	2,378,844	1,631,761	236,522	3,731	1	7,680	4,258,538
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
1871—							
Male.....	67.10	30.78	2.12	—	—	—	100
Female.....	63.85	31.51	4.64	—	—	—	100
1881—							
Male.....	66.12	31.55	2.33	—	—	—	100
Female.....	62.59	32.28	5.13	—	—	—	100
1891—							
Male.....	65.09	32.36	2.55	—	—	—	100
Female.....	61.18	33.38	5.44	—	—	—	100
1901—							
Male.....	63.55	33.76	2.68	.01	—	—	100
Female.....	59.71	34.51	5.77	.01	—	—	100
1911—							
Male.....	62.01	34.85	2.33	.02	.03	.76	100
Female.....	57.37	36.97	5.31	.02	.05	.28	100
1921—							
Male.....	59.58	37.49	2.64	.08	1	.21	100
Female.....	55.86	38.32	5.55	.09	1	.18	100

¹ Legally separated included with divorced.

12.—Conjugal Condition of the People of Canada, classified as Single, Married, Widowed, Divorced, Legally Separated, and not given, by Provinces, 1921.

Provinces.	Males.					
	Single.	Married.	Widowed.	Divorced. ¹	Not given.	Total.
Prince Edward Island.....	27,634	15,668	1,549	24	12	44,887
Nova Scotia.....	162,835	94,808	8,440	217	172	266,472
New Brunswick.....	121,428	69,674	5,918	125	206	197,351
Quebec.....	736,144	406,540	32,912	603	3,829	1,180,028
Ontario.....	828,538	607,186	42,954	1,135	2,077	1,481,890
Manitoba.....	196,072	117,480	6,472	246	297	320,567
Saskatchewan.....	263,186	142,431	7,456	337	290	413,700
Alberta.....	199,741	117,081	6,667	413	306	324,208
British Columbia.....	159,629	125,656	7,118	547	459	293,409
Yukon Territory.....	1,808	735	152	22	102	2,819
Northwest Territories.....	1,460	935	66	1	1,667	4,129
Royal Canadian Navy.....	279	201	4	—	1	485
Total.....	2,698,754	1,698,395	119,708	3,670	9,418	4,529,945

Provinces.	Females.					
	Single.	Married.	Widowed.	Divorced. ¹	Not given.	Total.
Prince Edward Island.....	24,717	15,616	3,358	18	19	43,728
Nova Scotia.....	144,859	93,384	18,752	210	160	257,365
New Brunswick.....	109,670	68,860	11,676	106	213	190,525
Quebec.....	720,362	399,271	57,809	758	2,971	1,181,171
Ontario.....	759,901	589,518	99,259	1,369	1,725	1,451,772
Manitoba.....	162,928	113,795	12,349	260	219	289,551
Saskatchewan.....	196,499	136,270	10,567	233	241	343,810
Alberta.....	143,958	110,190	9,607	289	202	264,246
British Columbia.....	114,199	103,433	12,846	483	212	231,173
Yukon Territory.....	582	576	78	4	98	1,338
Northwest Territories.....	1,169	848	221	1	1,620	3,859
Total.....	2,378,844	1,631,761	236,522	3,731	7,680	4,258,538

13.—Conjugal Condition of the Population, 15 Years of Age and over, 1921.

Age Periods.	Total population.	Single.		Married.		Widowed.		Divorced. ¹	Unknown.
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Number.
15-19—									
Males.....	403,259	400,929	99.4	2,275	0.6	28	—	6	21
Females.....	398,559	371,969	93.3	26,364	6.6	175	—	38	13
20-24—									
Males.....	350,984	287,438	81.9	62,812	17.9	600	0.2	87	47
Females.....	360,227	205,386	57.0	152,605	42.4	1,971	0.6	244	21
25-29—									
Males.....	347,645	165,836	47.7	178,994	51.5	2,519	0.7	234	62
Females.....	338,874	97,394	28.7	235,513	69.5	5,527	1.6	424	16
30-34—									
Males.....	343,263	95,571	27.8	242,444	70.6	4,789	1.4	387	72
Females.....	309,623	53,090	17.2	247,409	79.9	8,592	2.8	517	15
35-39—									
Males.....	342,313	68,726	20.1	265,917	77.7	7,103	2.1	470	97
Females.....	290,080	37,907	13.1	240,088	82.8	11,497	3.9	576	12
40-44—									
Males.....	286,470	47,273	16.5	230,132	80.3	8,438	2.9	556	71
Females.....	240,666	28,634	11.9	197,768	82.2	13,773	5.7	478	13
45-49—									
Males.....	236,896	33,463	14.1	193,384	81.6	9,542	4.0	455	52
Females.....	198,133	22,054	11.1	159,028	80.3	16,611	8.4	424	16
50-54—									
Males.....	195,141	25,163	12.9	158,616	81.3	10,863	5.6	457	42
Females.....	166,817	18,810	11.3	126,183	75.6	21,438	12.9	370	16
55-59—									
Males.....	148,137	16,876	11.4	119,693	80.8	11,191	7.6	349	28
Females.....	132,167	13,634	10.3	94,061	71.2	24,198	18.3	266	8
60-64—									
Males.....	126,400	13,916	11.0	98,588	78.0	13,573	10.7	300	23
Females.....	112,885	12,037	10.7	70,275	62.3	30,366	26.9	186	21
65-69—									
Males.....	90,621	8,514	9.4	68,125	75.2	13,770	15.2	183	29
Females.....	81,333	8,109	9.9	43,234	53.1	29,913	36.8	112	15

¹Includes "legally separated."

13.—Conjugal Condition of the Population, 15 Years of Age and Over, 1921—concluded.

Age Periods.	Total popula- tion.	Single.		Married.		Widowed.		Divorced ²	Unknown.
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	
70-74—									
Males.....	60,581	5,302	8.8	41,786	68.9	13,352	22.0	107	34
Females.....	56,850	5,983	10.5	23,152	40.7	27,642	48.6	54	19
75-79—									
Males.....	35,584	2,800	7.9	21,645	60.8	11,082	31.1	44	13
Females.....	35,767	3,642	10.2	10,302	28.8	21,787	60.9	21	15
80-84—									
Males.....	18,137	1,335	7.4	9,171	50.6	7,604	41.9	19	8
Females.....	19,465	2,038	10.5	3,552	18.3	13,849	71.2	13	13
85-89—									
Males.....	7,142	485	6.8	2,913	40.8	3,728	52.2	8	8
Females.....	8,237	816	9.9	961	11.7	6,457	78.4	2	1
90-94—									
Males.....	1,800	129	7.2	589	32.7	1,079	59.9	2	1
Females.....	2,380	228	9.6	195	8.2	1,949	81.9	1	7
95-99—									
Males.....	412	17	4.1	123	29.9	271	65.8	—	1
Females.....	565	55	9.7	40	7.1	470	83.2	—	—
100 and over—									
Males.....	90	4	4.4	34	37.8	51	56.7	—	1
Females.....	93	5	5.4	2	2.1	86	92.5	—	—
Age not given—									
Males.....	11,601	1,508	13.0	1,154	9.9	125	1.1	6	8,808
Females.....	9,676	1,002	10.4	989	10.2	221	2.3	5	7,459
Total, 15 years and over ¹ —									
Males.....	2,994,875	1,173,777	39.2	1,697,241	56.7	119,583	4.0	3,664	610
Females.....	2,752,771	881,791	32.0	1,630,732	59.2	236,301	8.6	3,726	221
Total all ages.....	8,788,483	5,077,598	57.8	3,330,156	37.9	356,230	4.0	7,401	17,098
Males.....	4,529,945	2,698,754	59.6	1,698,395	37.5	119,708	2.6	3,670	9,418
Females.....	4,258,538	2,378,844	55.8	1,631,761	38.3	236,522	5.6	3,731	7,680

¹Exclusive of ages not given.²Persons legally separated are included with divorced.4.—Dwellings and Families.¹

In 1921 the number of occupied dwellings in Canada, exclusive of the Yukon and Northwest Territories, for which statistics are not available, was 1,768,129 and the number of families 1,901,227, as compared with 1,408,689 dwellings and 1,482,980 families in the same area in 1911, and 1,018,015 dwellings and 1,058,386 families in 1901.

The average number of persons per dwelling in 1921, as respects the 8,775,853 persons in the nine provinces, was 4.96 as against 5.11 in 1911, 5.23 in 1901, 5.53 in 1891, 5.76 in 1881 and 6.08 in 1871; this would imply that the Canadian people are not less adequately housed than in the past. The average number of persons per family was 4.62 in 1921 as against 4.85 in 1911, 5.03 in 1901, 5.26 in 1891, 5.33 in 1881, and 5.60 in 1871, indicating a continuous decline since 1871 in the average number of persons constituting a household.

¹DWELLINGS.—A dwelling for Census purposes is a place in which one or more persons regularly sleep. It need not be a house in the usual sense of the word, but may be a hotel, boarding house, institution, or the like. A boat, a tent, a railway car, or a room in a factory or office building, although occupied by only one person, is counted as a dwelling house. On the other hand, an entire apartment house, containing many families, constitutes only one dwelling.

FAMILIES.—The term "Family", as used in the Census, signifies a group of persons, whether related by blood or not, who live together as one household, usually sharing the same table. One person living alone is counted as a family. Thus, a clerk in a store who regularly sleeps there is to be returned as a family and the store as his dwelling. On the other hand, all the occupants and employees of a hotel, or lodging house, if that is their regular abode, and all the inmates of an institution, whether a hospital, poor house, insane asylum, prison, school of learning, home for the aged, etc., are treated as constituting a single family.

In 1921 the urban families numbered 958,371 in 843,588 dwellings, or 1.14 families per dwelling. The number of persons per dwelling was 5.16, and the number of persons per family, 4.54.

In the rural districts the number of families was 942,856 in 924,541 dwellings, or 1.02 families per dwelling. The number of persons per family was 4.69 and the number of persons per dwelling 4.79.

14.—Dwellings and Family Households, by Provinces, 1871-1921.¹

Provinces.	Census years.	Population.	Number of dwellings.	Number of families.	Persons per dwelling.	Persons per family.	Families per dwelling.
Prince Edward Is..	1881	108,891	17,724	17,973	6.14	6.06	1.01
	1891	109,078	18,389	18,601	5.93	5.86	1.01
	1901	103,259	18,530	18,746	5.57	5.51	1.01
	1911	93,728	18,237	18,425	5.14	5.09	1.01
	1921	88,615	18,628	18,801	4.76	4.71	1.01
Nova Scotia.....	1871	387,800	62,501	67,811	6.20	5.72	1.08
	1881	440,572	74,154	79,596	5.94	5.54	1.07
	1891	450,396	79,102	83,733	5.69	5.38	1.06
	1901	459,574	85,313	89,386	5.39	5.14	1.05
	1911	492,338	93,784	98,491	5.25	5.00	1.05
	1921	523,837	102,807	108,723	5.10	4.82	1.06
New Brunswick....	1871	285,594	43,579	49,384	6.55	5.78	1.13
	1881	321,233	51,166	56,948	6.28	5.64	1.11
	1891	321,263	54,718	58,462	5.87	5.50	1.07
	1901	331,120	58,226	62,695	5.69	5.28	1.08
	1911	351,889	60,930	67,093	5.78	5.24	1.10
	1921	387,876	70,428	76,949	5.51	5.04	1.09
Quebec.....	1871	1,191,516	180,615	213,303	6.59	5.58	1.18
	1881	1,359,027	216,432	254,841	6.28	5.33	1.18
	1891	1,488,535	246,644	271,991	6.04	5.47	1.10
	1901	1,648,898	291,427	307,304	5.66	5.37	1.05
	1911	2,005,776	340,196	371,590	5.90	5.40	1.09
	1921	2,361,199	398,384	442,356	5.93	5.34	1.11
Ontario.....	1871	1,620,851	286,018	292,221	5.66	5.54	1.02
	1881	1,926,922	359,293	366,444	5.36	5.26	1.02
	1891	2,114,321	406,948	414,789	5.20	5.10	1.02
	1901	2,182,947	445,310	455,264	4.90	4.79	1.02
	1911	2,527,292	529,190	545,229	4.78	4.64	1.03
	1921	2,933,662	637,552	681,629	4.60	4.30	1.07
Manitoba.....	1881	62,260	12,803	14,169	4.86	4.39	1.11
	1891	152,506	30,790	31,786	4.95	4.80	1.03
	1901	255,211	49,784	51,056	5.13	5.00	1.03
	1911	461,394	85,720	91,230	5.38	5.06	1.06
	1921	610,118	117,541	128,984	5.19	4.73	1.10
Saskatchewan.....	1901	91,279	17,645	19,089	5.17	4.78	1.08
	1911	492,432	118,283	120,751	4.16	4.08	1.02
	1921	757,510	163,661	168,555	4.63	4.49	1.03
Alberta.....	1901	73,022	14,842	16,401	4.92	4.45	1.11
	1911	374,295	87,672	90,346	4.27	4.14	1.03
	1921	588,454	136,125	141,190	4.32	4.17	1.04
British Columbia..	1881	49,459	9,793	10,439	5.05	4.74	1.07
	1891	98,173	20,016	20,718	4.90	4.74	1.04
	1901	178,657	36,938	38,445	4.84	4.65	1.04
	1911	392,480	74,677	79,825	5.26	4.92	1.07
	1921	524,582	123,003	134,040	4.26	3.91	1.09
Canada ¹	1871	3,485,761	572,713	622,719	6.08	5.60	1.10
	1881	4,268,364	741,365	800,410	5.76	5.33	1.08
	1891	4,734,272	856,697	900,080	5.53	5.26	1.05
	1901	5,323,967	1,018,015	1,058,386	5.23	5.03	1.04
	1911	7,191,624	1,408,689	1,482,980	5.11	4.85	1.05
	1921	8,775,853	1,768,129	1,901,237	4.96	4.62	1.08

¹Exclusive of Yukon and Northwest Territories.

5.—Age Distribution.

The same causes which have in the past rendered the sex distribution of population in Canada somewhat unusual have also affected its age distribution. In the first stages of the settlement of a new colony, men in the prime of life constitute the bulk of the population, and women and children are conspicuous by their absence, so that there will be a disproportionately large male population between the ages of 20 and 50, together with a low birth rate. Later on in the settlement of a new country where there is land and food for all and where the early disproportion of the sexes has been overcome, there is a very high rate of natural increase, and an extraordinarily large proportion of children among the population. Thus in 1871 (see Table 15), no fewer than 287 out of every 1,000 of the population of Canada were children under 10 years of age, and over half the total population (526·76 out of every 1,000) were under 20 years of age. But with the growing urbanization of population, the average age at marriage increased and children came to be regarded as a liability rather than an asset. Thus in 1911, out of every 1,000 of the population, only 231·83 were under 10 years of age and 423·42 under 20 years of age. In 1921, however, 239·68 per 1,000 of the population were under 10 years of age and 434·82 per 1,000 under 20 years, the increase since 1911 being probably attributable to the decline in the proportion of adult immigrants to the total population.

Again, the change in the age distribution of the population of Canada since 1871 may be illustrated as follows: taking the Canadian who in 1921 was at the median age (*i.e.*, had exactly as many of the population younger than he as were older than he), we find that as nearly as can be estimated, this Canadian was in 1921, 23·943 years of age. Taking the males alone, their median age was in 1921 24·732 years, while the median age for females was 23·173 years. Now, taking the population of the four original provinces as taken at the census of 1871, and securing its median age as nearly as can be estimated we find that that age was for the total population 18·799 years, for the male population 18·777 years and for the female population 18·821 years. Thus the Canadian of median age, with exactly as many people younger as there are older, was in 1921 5·144 years older than in 1871—a fact mainly attributable to the smaller proportion of children in the population in the more recent year, but partly to the longer average period of life.

15.—Proportion per 1,000 of the Population by Age-Periods, 1871-1921.

Age Periods.	1871.	1881.	1891.	1901.	1911.	1921.
Under 1 year.....	30·567	28·019	24·922	24·497	25·734	23·859
1—4 years.....	115·649	108·508	99·963	95·211	97·413	96·486
5—9 “.....	140·691	128·251	121·242	114·663	108·685	119·334
10—19 “.....	239·854	227·404	219·712	210·906	191·585	195·138
20—29 “.....	171·436	175·957	178·080	173·550	189·335	159·041
30—39 “.....	111·404	113·099	122·079	129·259	141·938	146·246
40—49 “.....	79·995	83·817	88·441	98·494	100·071	109·480
50—59 “.....	54·788	58·086	62·360	67·886	69·121	73·080
60 and over.....	55·128	63·269	70·141	76·396	71·027	74·915
Not given.....	0·487	13·589	13·059	9·137	5·090	2·421

16.—Proportion per 1,000 of the Population by Age-Periods, by Provinces, 1921, with Totals for 1911.

Provinces.	0-9 years.	10-19 years.	20-44 years.	45-69 years.	70 years and over.	Age not given.
Prince Edward Island.....	218.83	204.31	312.33	203.79	60.24	0.50
Nova Scotia.....	229.58	208.32	331.50	182.53	47.26	0.81
New Brunswick.....	247.07	213.41	327.19	172.58	38.53	1.22
Quebec.....	264.22	219.26	335.09	150.52	27.08	3.83
Ontario.....	207.66	180.66	377.44	197.82	34.87	1.55
Manitoba.....	258.99	197.44	379.89	145.82	16.87	0.99
Saskatchewan.....	289.93	190.67	382.89	123.82	11.65	1.04
Alberta.....	262.36	183.38	400.39	141.18	11.70	0.99
British Columbia.....	198.31	158.07	424.57	198.89	18.42	1.74
Canada, 1921¹	239.68	195.14	365.27	169.38	28.11	2.42
Canada, 1911¹	231.83	191.59	385.35	158.03	28.12	5.09

¹The statistics for the Yukon and the Northwest Territories are not given in the table but are included in the total population of Canada.

17.—Male and Female Population of Canada by Age-Periods, 1881-1921.

Age Periods.	1881.			1891.		
	Male.	Female.	Total.	Male.	Female.	Total.
Under 1 year.....	61,704	59,473	121,177	61,308	59,149	120,457
1 year.....	50,298	48,288	98,586	52,160	50,833	102,993
2 years.....	65,187	63,069	128,256	65,465	63,898	129,363
3 years.....	62,217	60,455	122,672	63,854	62,047	125,901
4 years.....	60,616	59,144	119,760	63,328	61,563	124,891
Total under 5 years...	300,022	290,429	590,451	306,115	297,490	603,605
5 to 9 years.....	281,216	273,446	554,662	297,385	288,605	585,990
10 to 14 ".....	259,154	247,728	506,882	279,889	269,287	549,176
15 to 19 ".....	237,317	239,281	476,598	258,325	254,412	512,737
20 to 24 ".....	211,634	217,771	429,405	237,144	235,913	473,057
25 to 29 ".....	165,339	166,236	331,575	194,531	193,115	387,646
30 to 34 ".....	131,051	129,538	260,589	163,866	155,724	319,590
35 to 39 ".....	115,029	113,515	228,544	139,899	130,551	270,450
40 to 44 ".....	97,807	95,537	193,344	118,954	112,685	231,639
45 to 49 ".....	86,784	82,364	169,148	100,827	94,992	195,819
50 to 54 ".....	72,046	68,762	140,808	87,861	83,565	171,426
55 to 59 ".....	57,379	53,027	110,406	66,887	63,089	129,976
60 to 64 ".....	52,006	45,354	97,360	62,819	57,403	120,222
65 to 69 ".....	36,544	32,052	68,596	44,717	40,172	84,889
70 to 74 ".....	26,158	23,453	49,611	32,941	29,906	62,847
75 to 79 ".....	16,361	14,649	31,010	20,047	17,864	37,911
80 to 84 ".....	9,251	8,307	17,558	10,798	10,151	20,949
85 to 89 ".....	3,344	3,151	6,495	4,160	4,390	8,550
90 to 94 ".....	987	1,094	2,081	1,360	1,436	2,796
95 to 99 ".....	380	379	759	411	437	848
100 and over.....	99	110	209			
Not given.....	28,996	29,773	58,769	31,535	31,581	63,116
Total population	2,188,854	2,135,956	4,324,810	2,460,471	2,372,768	4,833,239

17.—Male and Female Population of Canada by Age-Periods, 1881-1921—concluded.

Age Periods.	1901.			1911.			1921.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Under 1 year....	66,464	65,116	131,580	93,513	91,946	185,459	105,953	103,731	209,684
1 year.....	62,384	61,203	123,587	87,399	86,002	173,401	104,575	103,213	207,788
2 years.....	65,245	64,182	129,427	90,697	88,943	179,640	105,815	104,152	209,967
3 years.....	64,748	64,158	128,906	89,688	87,730	177,418	108,421	106,214	214,635
4 years.....	65,455	64,030	129,485	86,922	84,643	171,565	108,685	106,891	215,576
Total under 5 years....	324,296	318,689	642,985	448,219	439,264	887,483	533,449	524,201	1,057,650
5 to 9 years....	311,134	304,765	615,899	395,045	388,207	783,252	528,700	520,061	1,048,761
10 to 14 "....	295,674	284,665	580,339	354,911	345,401	700,312	461,320	451,829	913,149
15 to 19 "....	280,275	272,228	552,503	351,244	329,129	680,373	403,259	398,559	801,818
20 to 24 "....	256,981	251,823	508,804	385,855	320,435	706,290	350,984	360,227	711,211
25 to 29 "....	216,334	207,051	423,385	370,494	287,684	658,178	347,645	338,874	686,519
30 to 34 "....	188,125	174,942	363,067	310,339	244,777	555,116	343,263	309,623	652,886
35 to 39 "....	172,553	158,673	331,226	257,875	209,904	467,779	342,313	290,080	632,393
40 to 44 "....	152,036	137,822	289,858	213,018	176,677	389,695	286,470	240,666	527,136
45 to 49 "....	125,636	113,550	239,186	178,715	152,768	331,483	236,896	198,133	435,029
50 to 54 "....	106,107	97,857	203,964	152,718	132,366	285,084	195,141	166,817	361,958
55 to 59 "....	82,136	78,535	160,671	112,952	100,096	213,048	148,137	132,167	280,304
60 to 64 "....	72,807	68,156	140,963	94,318	83,786	178,104	126,400	112,885	239,285
65 to 69 "....	54,497	51,176	105,673	67,626	63,523	131,149	90,621	81,383	172,004
70 to 74 "....	39,086	37,294	76,380	47,807	46,197	94,004	60,581	56,850	117,431
75 to 79 "....	24,548	23,248	47,796	30,266	29,260	59,526	35,584	35,767	71,351
80 to 84 "....	13,090	12,740	25,830	15,550	15,921	31,471	18,137	19,465	37,602
85 to 89 "....	4,848	4,990	9,838	6,184	6,687	12,871	7,142	8,237*	15,379
90 to 94 "....	1,356	1,554	2,910	1,693	2,010	3,703	1,800	2,380	4,180
95 to 99 "....	423	538	961	417	502	919	412	565	977
100 and over....				62	58	120	90	93	183
Not given.....	29,766	19,311	49,077	26,687	9,996	36,683	11,601	9,676	21,277
Total population....	2,751,768	2,619,607	5,371,315	3,821,995	3,384,648	7,206,643	4,529,945	4,258,538	8,788,483

6.—Racial Origin.

In five out of the six censuses of Canada since Confederation the racial origin of each person has been secured, the exception being in 1891. The object of this question is to ascertain from what basic ethnic stocks the Canadian population, more particularly the recently immigrated population, is derived. The answer "Canadian" is not accepted under this heading, as the purpose of the question is to obtain, in so far as possible, a definition of "Canadian" in terms of racial derivation. Of this procedure of the census, criticism has been received on two main grounds: (a) that there are Canadians whose family is of several generations' residence in the country who may not know their ultimate racial origin, or who may be of very mixed racial origin; and (b) that the practice tends to perpetuate racial distinctions which it is desirable to obliterate. As against these criticisms respectively, the following must be considered: (a) that Canadians whose family is of three or more generations residence are enumerated and differentiated through the question on the birth place of parents above described; (b) that notwithstanding the desirability of racial assimilation, there are special features in connection with the process that require appraisalment and study; for example, 295 children of Chinese fathers and 618 of Japanese fathers were born in Canada (not including the province of Quebec) in 1921. Again, the fact that the constitution of Canada is based on the presence of two dominant races points to the desirability of a measure-

ment of these factors; only recently it has been widely pointed out that the original French colony, numbering 75,000 at the date of the Conquest, has expanded to over three millions today; measurements of this kind would be impossible if the answer "Canadian" instead of "French" were accepted under the heading of racial origin, yet undoubtedly if the descendants of the original French colonists are not "Canadians," no one is; (c) finally, racial origin is an important subject for study in a "new" country like Canada from a scientific standpoint, *i.e.*, from the standpoint of the student of ethnology, criminology, and the social and "biometric" sciences in general.

To accept the answer "Canadian" to the question on racial origin would confuse the data and defeat the purpose for which the question is asked.

Racial Distribution 1871, 1881, 1901—1921.—The racial origins of the people of Canada as collected at the censuses of 1871, 1881, 1901, 1911 and 1921 are shown in Table 18, while percentage figures are given in Table 19 for the populations of the various racial origins at the above censuses.

During the past decade the total increase of population was 1,581,840. The increase in the population of English origin was 722,346, or 45·67 p.c. of the total; of Irish, 57,433, or 3·63 p.c.; of Scottish, 175,757, or 11·11 p.c.; of other British 16,382, or 1·04 p.c.; of French 397,861, or 25·15 p.c. The British races were responsible for 61·66 p.c. of the total increase in population during the decade, and, together with the French population, which is almost wholly a native-born population, account for 1,369,779, or more than 86·6 p.c. of the total increase for the decade.

When the changes in the racial distribution of the population during the first two decades of the century are considered, one of the most notable features is the increase in the population of English race from 23·47 p.c. in 1901 to 25·30 p.c. in 1911 and 28·96 p.c. in 1921. The Irish element in the population has declined fairly rapidly from 18·41 p.c. in 1901 to 14·58 p.c. and 12·61 p.c. in 1921, and the Scottish from 14·90 in 1901 to 13·85 in 1911 and 13·35 in 1921. The total population of the British races was 57·03 p.c. in 1901, 54·08 p.c. in 1911, and 55·40 p.c. in 1921. The other great racial element in the population is the French, which constituted 30·70 p.c. of the total population in 1901, 28·52 p.c. in 1911 and 27·91 p.c. in 1921. Thus 87·73 p.c. of the population were in 1901 of the two great racial stocks, 82·60 p.c. in 1911 and 83·31 p.c. in 1921. Thus, taking the past 20 years as a unit of time, there has been a decline in the percentage of the British and French racial elements to the total population.

This decline has in the main been due to the immigration of continental Europeans to Canada during the past twenty years, which have seen the growth of the Scandinavian element in our population from 0·58 p.c. to 1·90 p.c., of the Hebrews from 0·30 p.c. to 1·44 p.c., and of the Italians from 0·20 to 0·76 p.c. The population of German race, if we may accept the statistics furnished, has declined from 5·78 p.c. of the total in 1901 to 3·35 p.c., but on the other hand, the Dutch have increased from 0·63 p.c. in 1901 to 1·34 p.c. in 1921. Altogether, the percentage of the total population of European racial origin, other than British and French, increased from 8·51 p.c. of the total in 1901 to 14·15 p.c. in 1921.

Asiatic immigration to Canada in the past twenty years has been responsible for the increase of the Asiatic population from 0·44 p.c. to 0·75 p.c. of the population. In the same period the population of Negro origin has declined from 0·32 p.c. to 0·21 p.c. of the total, and that of Indian origin from 2·38 p.c. to 1·26 p.c.

18.—Origins of the People According to the Censuses of 1871, 1881, 1901, 1911 and 1921.

Origin.	1871.	1881.	1901.	1911.	1921.
British—	No.	No.	No.	No.	No.
English.....	706,369	881,301	1,260,899	1,823,150	2,545,496
Irish.....	846,414	957,403	988,721	1,050,384	1,107,817
Scotch.....	549,946	699,863	800,154	997,880	1,173,637
Other.....	7,773	9,947	13,421	25,571	41,953
Total British.....	2,110,502	2,548,514	3,063,195	3,896,985	4,868,903
French.....	1,082,940	1,298,929	1,649,371	2,054,890	2,452,751
Austrian.....	—	—	10,947	42,535	107,671
Belgian.....	—	—	2,994	9,593	20,234
Bulgarian and Rumanian.....	—	—	354	5,875	15,235
Chinese.....	—	4,383	17,312	27,774	39,587
Czech (Bohemian and Moravian).....	—	—	—	—	8,840
Dutch.....	29,662	30,412	33,845	54,986	117,506
Finnish.....	—	—	2,502	15,497	21,494
German.....	202,991	254,319	310,501	393,320	294,636
Greek.....	—	—	291	3,594	5,740
Hebrew.....	125	667	16,131	75,681	126,196
Hungarian.....	—	—	1,549	11,605	13,181
Indian.....	23,037	108,547	127,941 ¹	105,492	110,814
Italian.....	1,035	1,849	10,834	45,411	66,769
Japanese.....	—	—	4,738	9,021	15,868
Negro.....	21,496	21,394	17,437	16,877	18,291
Polish.....	—	—	6,285	33,365	53,403
Russian.....	607	1,227	19,825	43,142	100,064
Scandinavian ²	1,623	5,223	31,042	107,535	167,359
Serbo-Croatian.....	—	—	—	—	3,906
Swiss.....	2,962	4,588	3,865	6,625	12,837
Turkish.....	—	—	1,681	3,880	313
Ukranian—Bukovinian.....	—	—	3	9,960	1,616
Galician.....	—	—	5,682	35,158	24,456
Ruthenian.....	—	—	4	29,845	16,861
Ukranian.....	—	—	—	—	63,788
Various.....	1,220	3,952	1,454	20,652	18,915
Unspecified.....	7,561	40,806	31,539	147,345	21,249
Grand Total.....	3,485,761	4,324,810	5,371,315	7,206,643	8,788,483

NOTE.—Origins were not taken in 1891. ¹Includes "half-breeds". ²Includes Danish, Icelandic, Norwegian and Swedish; in 1921 they were respectively 21,124, 15,876, 68,856 and 61,503. ³Included with Austrians. ⁴Included with Galicians.

19.—Proportion per cent which the People of Each Origin form of the Total Population, 1871, 1881, 1901, 1911 and 1921.

Origin.	Number per cent of population.				
	1871.	1881.	1901.	1911.	1921.
British—	p.c.	p.c.	p.c.	p.c.	p.c.
English.....	20·26	20·38	23·47	25·30	28·96
Irish.....	24·28	22·14	18·41	14·58	12·61
Scotch.....	15·78	16·18	14·90	13·85	13·35
Other.....	0·23	0·23	0·25	0·35	0·48
Total British.....	60·55	58·93	57·03	54·08	55·40
French.....	31·07	30·03	30·70	28·52	27·91
Austrian.....	—	—	0·20	0·59	1·23
Belgian.....	—	—	0·06	0·13	0·23
Bulgarian and Rumanian.....	—	—	0·01	0·08	0·17
Chinese.....	—	0·10	0·32	0·39	0·45
Czech (Bohemian and Moravian).....	—	—	—	—	0·10
Dutch.....	0·85	0·70	0·63	0·76	1·34
Finnish.....	—	—	0·05	0·22	0·24
German.....	5·82	5·88	5·78	5·46	3·35
Greek.....	—	—	0·01	0·05	0·06
Hebrew.....	—	0·02	0·30	1·05	1·44
Hungarian.....	—	—	0·03	0·16	0·14
Indian.....	0·66	2·51	2·38	1·46	1·26
Italian.....	0·03	0·04	0·20	0·63	0·76
Japanese.....	—	—	0·09	0·13	0·18
Negro.....	0·62	0·50	0·32	0·23	0·21
Polish.....	—	—	0·12	0·46	0·61
Russian.....	0·02	0·03	0·37	0·60	1·14
Scandinavian.....	0·05	0·12	0·58	1·49	1·90
Serbo-Croatian.....	—	—	—	—	0·04
Swiss.....	0·08	0·11	0·07	0·09	0·15
Turkish.....	—	—	0·03	0·05	0·01
Ukranian—Bukovinian.....	—	—	—	0·14	0·02
Calician.....	—	—	0·11	0·49	0·28
Ruthenian.....	—	—	—	0·41	0·19
Ukranian.....	—	—	—	—	0·73
Various.....	0·03	0·09	0·03	0·29	0·22
Unspecified.....	0·22	0·94	0·59	2·04	0·24
Total.....	100·00	100·00	100·00	100·00	100·00

20.—Racial Origin of the Population, by Provinces and Territories, 1921.

No.	Origins.	P. E. Island.	Nova Scotia.	New Brunswick.	Quebec.
	Population.....Total	88,615	523,837	387,876	2,361,199
1	<i>British.....</i>	75,627	407,618	253,002	357,108
2	English.....	23,313	202,106	131,664	196,982
3	Irish.....	18,743	55,712	68,670	94,947
4	Scotch.....	33,437	148,000	51,308	63,915
5	Other.....	134	1,800	1,360	1,264
6	French.....	11,971	56,619	121,111	1,889,277
7	Austrian.....	2	682	80	1,901
8	Belgian.....	2	841	212	3,284
9	Chinese.....	14	315	185	2,335
10	Czech (Bohemian and Moravian).....	-	229	7	82
11	Danish.....	17	352	976	595
12	Dutch.....	239	11,506	3,638	1,413
13	Finnish.....	1	45	35	76
14	German.....	260	27,046	1,698	4,668
15	Greek.....	3	150	54	1,780
16	Hebrew.....	21	2,161	1,243	47,977
17	Hungarian.....	-	180	6	89
18	Icelandic.....	1	9	-	11
19	Indian.....	235	2,048	1,331	11,566
20	Italian.....	26	1,620	367	16,141
21	Japanese.....	-	3	3	32
22	Negro.....	43	6,175	1,190	1,046
23	Norwegian.....	10	482	588	705
24	Polish.....	-	980	65	3,264
25	Rumanian.....	-	111	11	1,371
26	Russian.....	1	520	185	2,802
27	Serbo-Croatian.....	-	107	11	67
28	Albanian.....	-	-	-	-
29	Croatian.....	-	-	-	-
30	Jugo-Slavic.....	-	106	7	64
31	Montenegrin.....	-	-	2	-
32	Serbian.....	-	1	2	3
33	Slovenian.....	-	-	-	-
34	Swedish.....	6	490	578	908
35	Swiss.....	7	833	31	764
36	Syrian.....	83	1,140	594	2,570
37	Ukranian.....	-	389	3	1,176
38	Bukovinian.....	-	-	-	7
39	Galician.....	-	88	2	386
40	Ruthenian.....	-	44	1	47
41	Ukranian.....	-	257	-	736
42	Unspecified.....	44	519	534	6,066
43	<i>Various.....</i>	2	667	138	2,125
44	Arabian.....	-	20	7	42
45	Armenian.....	1	4	-	119
46	Brazilian.....	-	-	-	1
47	Bulgarian.....	-	27	25	78
48	Chilian.....	-	-	4	-
49	Egyptian.....	-	9	-	16
50	Eskimo.....	-	-	-	27
51	Hawaiian.....	-	-	-	-
52	Hindu.....	-	-	1	11
53	Jamaican.....	-	-	-	-
54	Laplander.....	-	-	-	-
55	Lettish.....	-	2	-	20
56	Lithuanian.....	-	168	-	1,209
57	Maltese.....	-	12	-	30
58	Mexican.....	-	3	-	8
59	Persian.....	-	-	-	3
60	Portuguese.....	-	167	35	51
61	Spanish.....	1	246	49	402
62	Turkish.....	-	17	17	106
63	Other.....	-	1	-	2

¹ Totals for Canada include personnel of Royal Canadian Navy.

20.—Racial Origin of the Population, by Provinces and Territories, 1921.—Concluded.

Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.	Northwest Territories.	Canada.	No.
2,933,662	610,118	757,510	538,454	524,582	4,157	7,988	8,788,483 ¹	
2,282,016	550,992	400,416	351,820	337,513	1,847	473	4,868,903	1
1,211,660	170,286	206,472	180,478	221,145	769	234	2,545,496	2
590,493	71,414	84,786	68,246	54,298	369	106	1,107,817	3
465,400	105,034	104,678	96,062	104,965	662	130	1,173,637	4
14,462	4,258	4,480	7,034	7,105	47	3	41,953	5
248,275	40,638	42,152	30,913	11,246	284	258	2,452,751	6
11,790	31,035	39,738	19,430	2,993	20	—	107,671	7
3,175	5,320	3,477	2,590	1,324	7	2	20,234	8
5,625	1,331	2,667	3,581	23,533	1	—	39,587	9
1,336	1,028	2,574	2,537	1,040	7	—	8,840	10
2,450	3,429	4,287	6,772	2,191	37	17	21,124	11
50,512	20,728	16,639	9,490	3,306	34	1	117,506	12
12,835	506	1,937	2,926	3,112	21	—	21,494	13
130,545	19,444	68,202	35,333	7,273	155	12	294,636	14
2,078	257	363	350	703	2	—	5,740	15
47,798	16,669	5,380	3,242	1,696	8	1	126,196	16
1,737	828	8,946	1,045	343	7	—	13,181	17
137	11,043	3,593	507	575	—	—	15,876	18
26,654	13,869	12,914	14,557	22,377	1,390	3,873	110,814	19
33,355	1,933	689	4,028	8,587	22	1	66,769	20
161	53	109	4,473	15,008	28	—	15,868	21
7,220	491	396	1,048	676	6	—	18,291	22
3,416	4,203	31,438	21,323	6,570	107	14	68,856	23
15,787	16,594	8,161	7,172	1,361	19	—	53,403	24
3,120	919	5,645	2,017	276	—	—	13,470	25
8,605	14,009	45,343	21,212	7,373	7	7	100,064	26
1,849	111	827	802	695	11	26	5,906	27
41	1	1	—	—	—	—	43	28
19	—	—	—	1	—	—	20	29
1,044	102	816	792	656	11	26	3,624	30
—	—	—	—	—	—	—	5	31
138	8	10	6	25	—	—	193	32
7	—	—	4	10	—	—	21	33
6,713	8,023	19,064	15,943	9,666	109	3	61,503	34
5,014	897	1,823	2,468	983	12	5	12,837	35
2,709	310	466	198	211	1	—	8,282	36
8,307	44,129	28,097	23,827	793	—	—	106,721	37
179	192	1,209	28	1	—	—	1,616	38
2,748	10,288	6,598	3,930	416	—	—	24,456	39
806	7,987	3,327	4,618	31	—	—	16,861	40
4,574	25,662	16,963	15,251	345	—	—	63,788	41
7,636	891	1,787	2,254	1,454	6	53	21,249	42
5,408	438	380	696	1,706	9	3,242	12,711	43
19	4	4	2	—	—	—	98	44
508	4	8	8	13	—	—	665	45
7	—	—	—	1	—	—	9	46
1,378	40	87	80	50	—	—	1,765	47
1	—	—	—	29	—	—	34	48
11	—	—	2	—	—	—	29	49
—	—	—	—	—	—	3,242	3,269	50
2	—	—	—	20	—	—	22	51
28	8	6	10	951	1	—	1,016	52
8	—	—	—	—	—	—	8	53
—	—	6	—	1	1	—	8	54
35	111	34	156	23	—	—	381	55
309	45	84	94	60	1	—	1,970	56
217	17	—	1	2	—	—	279	57
10	5	7	15	22	—	—	70	58
29	—	34	—	14	—	—	80	59
47	13	2	44	106	2	—	467	60
704	186	67	156	395	2	—	2,208	61
91	5	38	28	10	1	—	313	62
4	—	3	—	9	1	—	20	63

21.—Racial Origins of the People for Nine Cities of 60,000 and over, as shown by the Census of 1921.

Origins.	Montreal.	Toronto.	Winnipeg.	Vancouver.	Hamilton.	Ottawa.	Quebec.	Calgary.	London.
British—									
English.....	88,014	260,860	58,321	49,931	56,984	25,907	3,728	27,425	34,378
Irish.....	34,484	97,361	23,315	14,126	16,845	27,551	4,075	9,082	10,806
Scotch.....	25,672	83,620	37,069	27,878	20,263	14,434	822	15,599	9,789
Other.....	460	3,389	1,864	1,674	1,005	323	10	843	539
Total British	148,630	445,230	120,569	93,609	95,097	68,215	8,635	52,949	55,512
French.....	390,168	8,350	3,944	2,252	1,956	30,442	85,350	1,408	759
Austrian.....	1,223	1,175	6,785	271	872	222	7	435	84
Belgian.....	1,941	215	284	228	15	93	71	91	19
Chinese.....	1,735	2,134	814	6,484	374	282	98	688	228
Czech (Bohemian and Moravian).....	66	72	405	72	78	25	9	26	3
Dutch.....	432	3,961	1,236	738	1,615	402	10	628	624
Finnish.....	8	735	70	301	19	8	—	22	1
German.....	1,520	4,689	4,762	1,117	2,944	2,005	94	876	1,234
Greek.....	1,446	812	139	328	125	97	73	68	61
Hebrew.....	42,817	34,619	14,449	1,270	2,560	2,799	375	1,247	703
Hungarian.....	67	59	344	25	200	2	3	14	2
Indian.....	156	183	44	59	219	44	12	22	58
Italian.....	13,922	8,217	1,311	1,590	3,268	1,124	156	425	582
Japanese.....	15	42	35	4,246	—	9	—	41	4
Negro.....	862	1,236	424	324	375	38	14	66	209
Polish.....	2,427	2,380	5,696	174	1,478	172	7	287	173
Rumanian.....	1,026	256	389	34	435	207	1	97	9
Russian.....	2,067	1,332	3,791	357	950	133	5	1,973	115
Scandinavian.....	977	1,109	6,147	2,660	467	371	37	1,098	179
Serbo-Croatian.....	59	163	53	127	157	—	1	12	3
Swiss.....	428	583	278	154	122	79	18	154	53
Syrian.....	1,499	387	156	94	9	152	64	18	76
Ukranian—									
Bukovinian.....	—	16	6	—	—	15	—	—	1
Galician.....	327	365	2,013	76	120	69	—	57	6
Ruthenian.....	34	116	1,549	—	145	26	—	4	—
Ukranian.....	690	652	2,813	31	105	100	—	92	7
Various.....	1,623	1,333	159	350	281	37	15	24	33
Unspecified.....	2,341	1,472	422	246	165	675	138	208	221
Grand total..	618,506	521,893	179,087	117,217	114,151	107,843	95,193	63,305	60,959

7.—Religions.

The religions of the people of Canada have been recorded at each of the censuses taken since 1871, the instruction book issued to the enumerators at the census of 1921 stating that the religion of each person should be recorded, specifying the denomination, sect or community to which the person belonged or adhered, or which he or she favoured. The number of persons stating their preference for each of the principal religious bodies at each of the censuses is given in Table 22, while percentage figures are presented in Table 23.

In recent years there will be noted certain changes in the religious distribution of the population, corresponding in a considerable degree to the changes in racial origin noted above. For example, contemporaneously with the increase in the percentage of persons of English race during the past 20 years, there has taken place an increase in the Anglicans from 12.69 p.c. of the population in 1901 to 16.02 p.c. in 1921. The Presbyterians, to some extent as a result of Scottish immigration, have also increased from 15.68 p.c. of the total population in 1901 to 16.04 p.c. in 1921. Further, synchronizing with increasing immigration from continental Europe, the Lutherans have increased in the same period from 1.72 to 3.26 p.c., the Greek Church from 0.29 p.c. to 1.93 p.c., and the Jews from 0.31 to 1.42 p.c., while increasing Asiatic immigration is reflected in the growth of the adherents of Eastern religions from 0.29 to 0.46 p.c.

Of the total population of 1921 (8,788,483) 8,616,320, or 98.0 p.c., are classified as belonging to some Christian denomination or sect, 172,163, or 1.9 p.c., as

non-Christian, this figure including 125,197 Jews, 40,188 of Eastern religions and 6,778 Pagans, leaving less than 0.5 p.c. otherwise reported.

In Table 24 are given for Canada and for the provinces the number of persons accredited to each of 64 specified religions, as well as (in a footnote) the totals for Canada for 57 others. In addition, there were 119 sects enumerated, each with fewer than 10 adherents. Thus altogether 240 distinct sects or denominations are reported, as compared with 203 in 1911 and 157 in 1901.

22.—Religions of the People at each Decennial Census, 1871-1921.

Religions.	1871.	1881.	1891.	1901.	1911.	1921.
Adventists.....	6,179	7,211	6,354	8,058	10,406	14,179
Agnostics.....	—	—	—	3,613	3,110	594
Anglicans.....	494,049	574,818	646,059	681,494	1,043,017	1,407,994
Baptists ¹	239,343	296,525	303,839	318,005	382,720	421,731
Brethren.....	2,305	8,831	11,637	8,014	9,278	11,680
Buddhists.....	—	—	—	10,407	10,012	11,281
Christians.....	—	—	—	7,484	17,264	12,566
Christian Science.....	—	—	—	2,619	5,073	13,826
Confucians.....	—	—	—	5,115	14,562	27,114
Congregationalists.....	21,829	26,900	28,157	28,293	34,054	30,730
Disciples of Christ.....	—	20,193	12,763	14,900	11,329	9,367
Doukhobors.....	—	—	—	8,775	10,493	12,648
Evangelical Association.....	4,701	—	—	10,193	10,595	13,905
Friends (Quaker).....	7,345	6,553	4,650	4,100	4,027	3,149
Greek Church.....	18	—	—	15,630	88,507	169,832
Jews.....	1,115	2,396	6,414	16,401	74,564	125,197
Lutherans.....	37,935	46,350	63,982	92,524	229,864	286,458
Mennonites (inc. Hutterites).....	—	21,234	—	31,797	44,025	58,797
Methodists.....	567,091	742,981	847,765	916,886	1,079,993	1,159,458
Mormons.....	534	—	—	6,891	15,971	19,622
No Religion.....	5,146	2,634	—	4,810	26,027	21,739
Pagans.....	1,886	4,478	—	15,107	11,840	6,778
Plymouth Brethren.....	2,229	—	—	3,040	3,438	6,482
Presbyterians.....	544,998	676,165	755,326	842,531	1,116,071	1,409,407
Protestants.....	10,146	6,519	12,253	11,612	30,265	30,754
Roman Catholics.....	1,492,029	1,791,982	1,992,017	2,229,600	2,833,041	3,389,639
Salvation Army.....	—	—	13,949	10,308	18,834	24,733
Union Church.....	—	—	—	29	633	8,728
Unitarians.....	2,275	2,126	1,777	1,934	3,224	4,926
Other sects.....	27,553	20,145	36,942	17,923	31,316	55,915
Not given.....	17,055	86,769	89,355	43,222	32,490	19,354
Total.....	3,485,761	4,324,810	4,833,239	5,371,315	7,206,643	8,788,483

¹Including Tunkers.

23.—Ratio per cent of Specified Denominations to Total Population in Census Years.

Denominations.	1871.	1881.	1891.	1901.	1911.	1921.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Adventists.....	0.18	0.17	0.13	0.15	0.14	0.16
Anglicans.....	14.17	13.35	13.37	12.69	14.47	16.02
Baptists.....	6.87	6.86	6.29	5.92	5.31	4.80
Christians.....	—	—	—	0.13	0.23	0.14
Congregationalists.....	0.63	0.62	0.58	0.53	0.47	0.35
Disciples of Christ.....	—	0.47	0.26	0.28	0.16	0.11
Eastern religions ¹	—	—	0.19	0.29	0.39	0.46
Evangelical Association.....	0.13	—	—	0.19	0.15	0.16
Greek Church.....	—	—	—	0.29	1.23	1.93
Jews.....	0.03	0.60	0.13	0.31	1.03	1.42
Lutherans.....	1.09	1.06	1.32	1.72	3.19	3.26
Mennonites ²	—	—	—	0.59	0.62	0.67
Methodists.....	16.27	17.11	17.54	17.07	14.98	13.19
Mormons.....	0.02	—	—	0.13	0.22	0.22
No religion.....	0.15	—	—	0.09	0.36	0.25
Pagans.....	0.05	0.10	0.56	0.28	0.16	0.08
Presbyterians.....	15.63	15.64	15.63	15.68	15.48	16.04
Protestants.....	0.29	0.15	0.25	0.22	0.42	0.35
Roman Catholics.....	42.80	41.43	41.21	41.51	39.31	38.57
Salvation Army.....	—	—	0.29	0.19	0.26	0.28
All others.....	1.20	0.37	0.59	0.94	0.95	1.32
Unspecified.....	0.49	2.07	1.66	0.80	0.47	0.22
Total.....	100.00	100.00	100.00	100.00	100.00	100.00

¹Eastern Religions includes Confucians, Buddhists, Mohammedans, Shintos, Sikhs, Hindus, Bahais, Taoists.

²Included with Baptists in 1891.

24.—Religions of the People by

No.	Religions.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.
	Population, Total¹.....	88,615	523,837	387,876	2,361,199
1	Adventists.....	14	1,240	956	1,620
2	Agnostics.....	1	20	1	27
3	Anglicans.....	5,057	85,604	47,020	121,967
4	Apostolic Brethren.....	—	5	4	10
5	Atheists.....	1	7	23	40
6	Baptists.....	5,316	86,833	86,254	9,257
7	Believers.....	—	—	—	—
8	Brethren.....	4	192	270	651
9	Buddhists.....	—	7	—	87
10	Catholic Apostolic.....	—	—	—	13
11	Christadelphians.....	—	7	25	21
12	Christian Alliance.....	—	—	—	—
13	Christian Church.....	123	83	51	21
14	Christian Reform.....	—	—	—	—
15	Christians.....	475	1,003	596	182
16	Christian Science.....	3	224	152	427
17	Church of Christ.....	24	117	206	24
18	Church of God (New Dunker).....	12	87	—	12
19	Confucians.....	9	78	57	1,314
20	Congregationalists.....	8	2,372	559	4,715
21	Deists.....	—	1	1	8
22	Disciples of Christ.....	426	742	911	7
23	Doukhobors.....	—	—	—	1
24	Dutch Reform.....	—	4	—	4
25	Evangelical Association.....	—	29	56	96
26	Free Thinkers.....	1	28	4	111
27	Friends.....	—	27	7	17
28	Gospel People.....	29	3	16	—
29	Greek Church.....	5	950	116	5,961
30	Holiness Movement.....	—	4	28	229
31	International Bible Students Association.....	16	460	98	53
32	Independents.....	—	—	—	—
33	Jews.....	18	1,974	1,213	47,766
34	Labor Church.....	—	—	—	—
35	Lutherans.....	—	8,081	378	2,209
36	Mennonites (inc. Hutterites).....	3	2	4	6
37	Methodists.....	11,408	59,069	34,872	41,884
38	Mission.....	—	40	—	10
39	Mohammedans.....	—	40	10	31
40	Moravians.....	—	—	—	—
41	Mormons.....	8	46	6	34
42	New Thought.....	—	—	—	—
43	Non-Conformists.....	6	1	—	29
44	Non-Sectarian.....	13	18	8	35
45	No Religion.....	75	555	229	979
46	Pagans.....	1	7	2	5
47	Pentecostal.....	25	76	218	374
48	People's Church.....	5	—	—	—
49	Plymouth Brethren.....	—	121	110	337
50	Presbyterians.....	25,945	109,860	41,277	73,748
51	Protestants.....	35	165	211	14,148
52	Reformed Church.....	—	—	7	9
53	Roman Catholics.....	39,312	160,872	170,531	2,023,993
54	Salvation Army.....	108	2,071	736	658
55	Sikhs and Hindus.....	—	—	—	11
56	Shintos.....	—	—	—	—
57	Spiritualists.....	2	7	2	99
58	Swedenborgian (New Church).....	—	18	2	6
59	Theosophists.....	—	—	—	14
60	Undenominationalists.....	—	—	14	1
61	Union Church.....	—	5	—	33
62	Unitarian.....	17	89	46	676
63	United Brethren in Christ.....	—	19	1	6
64	Universalists.....	1	114	94	378
65	Various sects ²	24	42	41	150
66	Not given.....	85	418	453	6,690

¹Totals for Canada include personnel of Royal Canadian Navy.²Various sects comprise 25 Armenian, 25 Assembly, 12 Bahais, 17 Big Church, 17 Body of Christ, 71 Brotherhood, 10 Brother of Man, 95 Carmelite, 19 Children of God, 27 Church Community, 95 Church of First Born, 16 Christ's Church of China, 76 Communist, 45 Daniel's Band, 34 Dissenters, 12 Esoteric Law, 11 First Christ Church, 138 Followers of Christ, 33 Followers of Jesus, 37 Golden Rule, 17 Holy Cross, 58 Holy Roller, 39 Holy Worker, 23 Interdenominational, 74 Jesus Way, 18 Liberal, 72 Lith. Nat. Cath.

Provinces, Census 1921.

Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.	Northwest Territories.	Canada.	No.
2,933,662	610,118	757,510	588,454	524,582	4,157	7,988	8,788,483	
1,998	578	2,893	3,533	1,347	-	-	14,179	1
65	52	44	111	273	-	-	594	2
648,893	121,309	116,224	98,395	160,978	1,582	648	1,407,994	3
137	295	135	24	238	-	-	848	4
132	113	68	269	388	-	-	1,041	5
148,634	13,652	23,696	27,829	20,158	85	10	421,731	6
178	11	86	21	17	-	-	313	7
6,442	625	1,113	1,103	1,180	-	-	11,580	8
107	19	97	393	10,559	12	-	11,281	9
150	16	26	5	61	-	-	271	10
1,151	105	71	88	342	-	-	1,810	11
279	-	4	-	-	-	-	283	12
1,266	371	644	1,438	226	-	-	4,223	13
1	45	65	242	-	-	-	353	14
4,755	281	2,036	2,298	940	-	-	12,566	15
5,032	1,361	925	1,932	3,711	59	-	13,826	16
1,036	625	745	777	186	-	-	3,740	17
613	65	327	595	70	-	-	1,781	18
2,020	691	1,128	2,154	19,663	-	-	27,114	19
12,262	2,395	2,555	3,340	2,513	3	6	30,730	20
448	2	-	10	7	-	-	477	21
6,460	302	223	197	99	-	-	9,367	22
17	84	7,166	306	5,074	-	-	12,648	23
15	110	127	680	39	-	-	979	24
10,811	220	1,490	1,626	76	-	-	13,905	25
180	79	126	497	388	12	-	1,126	26
1,987	109	411	309	281	1	-	3,149	27
2,140	54	90	65	52	-	-	2,449	28
20,509	56,670	47,181	35,815	2,612	13	-	169,832	29
2,233	162	369	160	60	-	-	3,245	30
2,655	756	800	627	1,213	-	-	6,678	31
171	79	55	18	19	-	-	342	32
47,458	16,593	5,328	3,186	1,654	6	1	125,197	33
6	764	21	38	1	-	-	830	34
66,863	39,472	91,988	59,543	17,659	254	11	286,458	35
13,645	21,295	20,544	3,125	172	-	1	58,797	36
685,463	71,200	100,851	89,723	64,810	117	18	1,159,458	37
490	120	533	454	116	-	-	1,763	38
77	31	144	63	82	-	-	478	39
29	-	42	648	22	-	-	741	40
5,781	331	1,440	11,373	600	3	-	19,622	41
15	-	7	4	232	-	-	258	42
125	109	47	82	217	-	-	616	43
194	79	149	182	229	-	-	907	44
3,231	1,491	2,610	5,089	7,149	295	36	21,739	45
2,534	599	1,556	479	610	-	985	6,778	46
2,713	1,228	1,075	1,048	246	-	-	7,003	47
5	87	-	9	2	-	-	108	48
3,370	613	438	426	1,067	-	-	6,482	49
613,532	138,201	162,165	120,991	123,022	579	45	1,409,407	50
3,400	2,697	3,250	3,252	3,389	207	-	30,754	51
33	111	374	781	27	-	1	1,343	52
576,178	105,394	147,342	97,432	63,980	699	3,849	3,389,636	53
13,716	2,027	1,552	1,773	2,086	-	-	24,733	54
3	3	3	10	819	-	-	849	55
3	-	1	6	417	-	-	427	56
763	128	26	210	319	-	-	1,558	57
727	75	236	43	36	-	-	1,143	58
168	16	5	28	135	-	-	366	59
209	172	80	47	54	-	-	577	60
1,817	3,348	2,891	579	50	-	-	8,728	61
1,083	1,541	337	570	544	3	20	4,926	62
1,902	43	301	1,012	74	-	-	3,358	63
317	21	63	76	30	-	-	1,094	64
844	363	315	480	299	2	-	2,540	65
4,701	730	876	1,155	1,663	225	2,357	19,354	66

Church, 13 Lot of Jesus, 34 Materialist, 64 Messiah. 16 Metropolitan, 27 Nationalist, 29 Philosophist, 30 Polish Church, 24 Provestory, 56 Rationalist, 15 Rosierucian, 30 Round Church, 21 Sabbath Keeper, 134 Saints, 12 Saved by Grace, 13 Schismatic, 37 Sectarist, 61 Serbian Church, 76 Shiloite, 50 Socialists, 25 Solomon Reformists, 34 Swiss Ch., 27 Taoist, 16 Temple of God, 15 Temple Society, 12 Testimony of Jesus, 33 Truth, 32 Ukrainian Catholic, 11 Workers, 21 Zion Chapel, 92 Zionist—together with 364 of 119 othersects, each of which numbers fewer than 10 adherents.

8.—Birthplaces.

The nativity of the population of Canada, as at each of the six censuses, is shown by Canadian-born, British-born, United States-born, and other foreign-born in Table 25. The table shows that in 1871, 97·28 p.c. of the population were born under the British flag, while half a century later the percentage had declined to 89·87 p.c. Among these, the Canadian-born population was at its maximum percentage in 1901, with 86·98 p.c. of the total, while in 1921 that percentage was at its minimum, 77·75 p.c. As a consequence of the large immigration from the United Kingdom in the first two decades of the century, the British-born population has increased from 7·84 p.c. in 1901 to 12·12 p.c. in 1921.

The foreign-born population has been divided into United States-born and other foreign-born. Worthy of note is the fairly steady increase of the United States-born population from 1·85 p.c. in 1871 to 4·25 p.c. in 1921. Other foreign-born increased from 0·87 p.c. in 1871 to 6·23 p.c. in 1911, but have declined slightly to 5·88 p.c. of the total population in 1921.

25.—Birthplaces of the Population of Canada according to the Censuses of 1871-1921.

Years.	Canadian Born.	British Born.	Foreign Born.		Total Popula- tion.	Proportion to Total Population.			
			Born in United States.	Born in other Foreign Countries.		Canadian Born.	British Born.	Foreign Born.	
								United States Born.	Other Foreign Born.
	No.	No.	No.	No.	No.	p.c.	p.c.	p.c.	p.c.
1871....	2,894,591	496,477	64,447	30,651	3,485,761	83.04	14.24	1.85	0.87
1881....	3,721,826	478,615	77,753	46,616	4,324,810	86.06	11.07	1.79	1.08
1891....	4,189,368	490,573	80,915	72,383	4,833,239	86.68	10.15	1.67	1.50
1901....	4,671,815	421,051	127,899	150,550	5,371,315	86.98	7.84	2.38	2.80
1911....	5,619,682	834,229	303,680	449,052	7,206,643	77.98	11.58	4.21	6.23
1921....	6,832,747	1,065,454	374,024	516,258	8,788,483	77.75	12.12	4.25	5.88

The nativity of the 1921 population is indicated by sex in Table 26, for the various provinces and territories. In the Maritime Provinces, the population is shown by the census to be about 93 p.c. native-born, and in Quebec about 92 p.c. In Ontario, however, the proportion sinks to about 78 p.c., in Manitoba to about 63 p.c., in Saskatchewan to about 64 p.c., in Alberta to about 53 p.c., and in British Columbia to barely over 50 p.c.

About 40 p.c. of the total British-born population is in Ontario, while the British-born element bears the greatest proportion to the total in British Columbia, viz., 30·6 p.c. The foreign-born element reaches its maximum percentage in the rapidly growing provinces of Saskatchewan and Alberta—where it constitutes 26·3 p.c. and 29·5 p.c. of the total population respectively.

26.—Population Classified by Sex and Nativity, by Provinces and Territories, according to the Census of 1921, with Totals for 1911.

Provinces and Territories.	Total.			Canadian Born.		British Born.		Foreign Born.	
	Male.	Female.	Both Sexes.	Male.	Female.	Male.	Female.	Male.	Female.
P. E. Island....	44,887	43,728	88,615	43,702	42,548	509	565	676	615
Nova Scotia....	266,472	257,365	523,837	243,181	237,151	15,445	14,074	7,846	6,140
New Brunswick	197,351	190,525	387,876	186,417	180,001	5,495	5,214	5,439	5,310
Quebec.....	1,180,028	1,181,171	2,361,199	1,082,483	1,090,140	44,830	45,034	52,715	45,997
Ontario.....	1,481,890	1,451,772	2,933,662	1,139,262	1,152,717	237,220	222,357	105,408	76,698
Manitoba.....	320,567	289,551	610,118	198,284	189,462	61,651	51,463	60,632	48,626
Saskatchewan.	413,700	343,810	757,510	241,557	216,276	57,430	42,925	114,713	84,609
Alberta.....	324,208	264,246	588,454	166,176	148,914	55,724	43,668	102,308	71,664
British Columbia.....	293,409	231,173	524,582	136,758	127,288	87,769	72,983	68,882	30,902
Yukon Territ'y.	2,819	1,338	4,157	1,583	1,017	486	86	750	235
N.W. Territories.....	4,129	3,859	7,988	3,951	3,830	80	13	98	16
Royal Canadian Navy.....	485	—	485	49	—	433	—	3	—
Canada—1921..	4,529,945	4,258,538	8,788,483	3,443,403	3,389,344	567,072	498,382	519,470	370,812
“ 1911..	3,821,995	3,384,648	7,206,643	2,849,442	2,770,240	501,138	332,284	471,415	282,124

Table 27 shows the extent of the migration of the population born in the eastern provinces to the Prairie Provinces and British Columbia. Of the total population born in Ontario, Quebec and the Maritime Provinces and living in Canada, 9.88 p.c. had moved from the province of birth to some other province in 1921, as against 9.46 p.c. in 1911. Of the total migration (568,965) from the eastern provinces reported in the 1921 census, 68.88 p.c. took up residence in the western provinces, while out of a total migration (481,935) from the eastern provinces in the previous census, 73.20 p.c. were living in the west. The interprovincial movement of the Maritime Provinces-born has been largely to the extreme west, Alberta and British Columbia, while that from Quebec and Ontario has been more largely to the middle west, Manitoba and Saskatchewan.

27.—Interprovincial Movement of Population, from Eastern to Western Provinces, 1921 and 1911.

Province of birth.	Born in specified province.	Population.				Distribution of migrants in the Western Provinces.				
		Migrants.				Man.	Sask.	Alta.	B.C.	
		Total.		Living in the West.						
		No.	Per cent.	No.	Per cent of all migrants.					
Prince Edward Island.	1921	101,513	17,331	17·07	8,431	48·65	1,103	2,375	2,458	2,495
	1911	103,410	13,966	13·51	6,810	48·76	967	1,515	1,846	2,482
Nova Scotia.	1921	506,824	42,963	8·48	24,342	56·66	3,229	5,120	7,423	8,570
	1911	476,210	32,311	6·79	19,761	61·16	2,955	3,400	5,003	8,570
New Brunswick.	1921	378,902	33,295	8·79	14,929	44·84	1,767	2,824	4,041	6,297
	1911	345,253	25,961	7·52	12,513	48·20	1,569	1,916	2,876	6,152
Quebec.	1921	2,266,062	145,179	6·41	52,739	36·33	11,794	17,735	14,970	8,240
	1911	1,939,886	113,068	5·83	41,342	36·56	10,765	12,969	10,112	7,496
Ontario.	1921	2,505,561	330,197	13·18	291,447	88·26	67,206	104,961	68,919	50,361
	1911	2,232,325	296,629	13·29	272,364	91·82	73,110	96,206	57,530	45,518
Total.	1921	5,758,863	568,965	9·88	391,888	68·88	35,099	133,015	97,811	75,963
	1911	5,097,084	431,935	9·46	352,790	73·20	39,366	116,006	77,367	70,103

In Table 28 it is shown that of the total increase (1,581,840) in population from 1911 to 1921, the Canadian born made up 1,213,065 or 76.7 p.c.; natives of the British Islands, 220,887 or 13.9 p.c.; natives of other British possessions, including born “at sea,” 10,338 or 0.7 p.c., leaving 137,550 or 8.7 p.c. of the total

increase from 1911 to 1921 attributable to non-British sources. Of these 137,550 added to the population from alien birthplaces, immigrants born in United States supplied 70,344 or 51.1 p.c. of the total. The census of 1911 showed a ten-year increase in population of 1,835,328, of which Canadian born contributed 947,867 or 51.7 p.c.; born elsewhere in the Empire, 413,178 or 22.5 p.c. and alien born, 474,283 or 25.8 p.c.

Foreign-Born.—The classification of the foreign born population according to birthplaces has been made on a post-war basis, the statistics of 1901 and 1911 having been prepared to correspond with the territorial re-arrangements consequent upon the World War of 1914-1918 and existing at the date of the census, June 1, 1921. The following statement shows the various transfers of territory between 1910 and 1920, which had to be taken into account in constructing tables which would give fairly accurate comparative statistics of country of birth of the alien born population of Canada in 1911 and 1921. In order the more readily to locate the countries affected by the changes, they are arranged by geographical groups as follows:—

NORTHWESTERN EUROPE.

Belgium.—Annexation of towns of Eupen and Malmédy from Germany.

Denmark.—Annexation of Northern Schleswig from Germany.

France.—Annexation of Alsace-Lorraine from Germany.

CENTRAL AND EASTERN EUROPE.

Austria.—Annexation of territory from Hungary. Detachments of territory to Czechoslovakia (q.v.), Poland (Galicia), Jugo-Slavia (q.v.), Rumania (Bukowina), and Italy (Trentino region, Gorizia, Istrian peninsula, and Trieste): and detachment of Fiume (free state: see "Other Europe").

Bulgaria.—Detachments of territory to Greece (Bulgarian Thrace) and Jugo-Slavia (ceded territory includes towns of Strumitsa and Tsaribrod).

Czechoslovakia.—Created from territory formerly included in Austria-Hungary (Bohemia, Moravia, Ruthenia, and Slovakland).

Germany.—Detachments of territory to France (Alsace-Lorraine), Belgium (Eupen and Malmédy), Poland (West Prussia and Posen), and Denmark (Northern Schleswig) and of Saar Basin (now governed by a Commission of the League of Nations: see "Other Europe") and of Danzig (free city: see "Other Europe.")

Hungary.—Detachments of territory to Austria, Czechoslovakia (Ruthenia and Slovakland), Rumania (ceded territory includes Transylvania and part of Banat), and Jugo-Slavia (q.v.)

Jugo-Slavia.—Created from territory formerly constituting Serbia and Montenegro and from territory formerly included in Austria-Hungary (Carniola, Dalmatia, Croatia, Slavonia, part of Banat, Bosnia, and Herzegovina) and Bulgaria (ceded territory includes towns of Strumitsa and Tsaribrod).

Lithuania.—Formerly included in Russia.

Poland.—Restored to its original status as an independent country by reuniting Austrian Poland (Galicia), German Poland (West Prussia and Posen), and Russian Poland.

Rumania.—Annexations of territory from Austria (Bukowina), Hungary (Transylvania, part of Banat and other territory), and Russia (Bessarabia).

Russia.—Detachments of territory to Poland (Russian Poland) and Rumania (Bessarabia), and detachment of Lithuania.

Turkey in Europe.—Detachments of territory to Greece (Turkish Islands of the Aegean, Turkish Thrace and Smyrna) and detachment of Albania.

SOUTHERN EUROPE.

Albania.—Formerly included in Turkey in Europe.

Greece.—Annexations of territory from Bulgaria (Bulgarian Thrace) and Turkey in Europe (Turkish Islands of the Aegean, Turkish Thrace, and Smyrna).

Italy.—Annexation of territory from Austria (Trentino region, Gorizia, Istrian peninsula, and Trieste).

OTHER EUROPE.

Danzig.—Free city: formerly included in Germany.

Fiume.—Free state: formerly included in Austria.

Saar Basin.—Under government of a Commission of the League of Nations: formerly included in Germany.

ASIA.

Armenia.—Formerly included in Turkey in Asia.

Palestine.—Formerly included in Turkey in Asia.

Syria.—Formerly included in Turkey in Asia.

Turkey in Asia.—Detachment of Armenia, Palestine, and Syria, and detachment of Hedjaz (now included in "Other Asia").

Other Asia.—Includes Hedjaz, formerly part of Turkey in Asia.

28.—Birthplaces of the Population, by Provinces and Countries, 1911 and 1921.

Birthplaces.	Population.		Increase in 10 years.		Per cent of total population born in specified country.	
	1911.	1921.	No.	p.c.	1911.	1921.
BRITISH-BORN.....	6,453,911	7,898,201	1,444,290	22.38	89.56	89.87
Canada.....	5,619,682	6,832,747	1,213,065	21.59	77.98	77.75
Prince Edward Island.....	103,410	101,513	-1,897	-1.83	1.43	1.16
Nova Scotia.....	476,210	506,824	30,614	6.43	6.61	5.77
New Brunswick.....	345,253	378,902	33,649	9.75	4.79	4.31
Quebec.....	1,939,886	2,266,062	326,176	16.81	26.92	25.78
Ontario.....	2,232,325	2,505,562	273,237	12.24	30.98	28.51
Manitoba.....	214,566	351,444	136,878	63.79	2.98	4.00
Saskatchewan.....	108,149	314,830	206,681	191.11	1.50	3.58
Alberta.....	78,205	211,643	133,438	170.63	1.08	2.41
British Columbia.....	87,935	167,169	79,234	90.11	1.22	1.90
Yukon.....	1,824	1,751	-73	-4.00	.02	.02
Northwest Territories.....	7,684	6,919	-765	-9.96	.11	.08
Not stated.....	24,235	20,128	-4,107	-16.95	.34	.23
British Isles.....	804,234	1,025,121	220,887	27.47	11.16	11.66
England.....	510,674	686,663	175,989	34.46	7.09	7.81
Ireland.....	92,874	93,301	427	.46	1.29	1.06
Scotland.....	169,391	226,483	57,092	33.70	2.35	2.58
Wales.....	8,727	13,779	5,052	57.89	.12	.16
Lesser Isles.....	2,860	4,807	1,947	68.08	.04	.05
Country not stated.....	19,708	88	-19,620	-99.55	.27	—
British Possessions.....	29,188	39,680	10,492	35.95	.42	.45
Australia.....	2,655	2,855	200	7.53	.04	.03
India.....	4,491	3,848	-643	-14.32	.06	.05
Newfoundland.....	15,469	23,107	7,638	49.38	.21	.26
New Zealand.....	903	1,085	182	20.16	.01	.01
South Africa.....	1,166	1,760	594	50.94	.02	.02
West Indies.....	1,878	4,270	2,392	127.37	.03	.05
Other British Possessions.....	2,626	2,755	129	4.91	.05	.03
FOREIGN-BORN.....	752,732	890,282	137,550	18.27	10.44	10.13
Europe.....	404,941	459,328	54,387	13.43	5.62	5.23
Austria.....	67,502	57,535	-9,967	-14.77	.94	.65
Belgium.....	7,975	13,276	5,301	66.47	.11	.15
Bulgaria.....	19,937	1,005	—	—	.28	.01
Czechoslovakia.....	1,689	4,322	2,633	155.89	.02	.05
Denmark.....	4,937	7,192	2,255	45.68	.07	.08
Finland.....	10,987	12,156	1,169	10.64	.15	.14
France.....	17,619	19,249	1,630	9.25	.24	.22
Galicia.....	31,373	36,025	4,652	14.83	.44	.41
Germany.....	39,577	25,266	-14,311	-36.16	.55	.29
Greece.....	2,640	3,769	1,129	42.77	.04	.04
Holland.....	3,808	5,828	2,020	53.05	.05	.07
Hungary.....	10,586	7,493	-3,093	-29.22	.15	.09
Iceland.....	7,109	6,776	-333	-4.68	.10	.08
Italy.....	34,739	35,531	792	2.28	.48	.40
Jugo-Slavia.....	—	1,946	—	—	—	.02
Norway.....	20,968	23,127	2,159	10.30	.29	.26
Poland.....	1	29,279	—	—	—	.33
Rumania.....	2	22,779	—	—	—	.26
Russia.....	89,984	101,055	101,055	—	1.25	1.15
Sweden.....	28,226	27,700	-526	-1.86	.39	.32
Switzerland.....	—	3,479	—	—	—	.04
Ukraine.....	—	11,357	—	—	—	.13
Other.....	5,285	3,183	-2,102	-39.77	.07	.04
Asia.....	40,946	53,636	12,690	30.99	.57	.61
China.....	27,083	36,924	9,841	36.34	.37	.42
Japan.....	8,425	11,650	3,225	38.28	.12	.13
Syria.....	2,907	3,879	972	33.44	.04	.04
Turkey.....	1,861	401	-1,460	-78.45	.03	.01
Other.....	670	782	112	16.72	.01	.01
United States.....	303,680	374,024	70,344	23.16	4.21	4.25
West Indies.....	211	123	-88	-41.71	—	—
Other Countries.....	2,954	3,171	217	7.35	.04	.04
At Sea.....	807	653	-154	-19.08	.01	.01
Total Population.....	7,206,643	8,788,483	1,581,840	21.95	100.00	100.00

¹ Included with Russia. ² Included with Bulgaria.

In determining the classification of the immigrant population as rural or urban (Table 29) the population of cities, towns and incorporated villages was counted as urban and the remainder as rural. Out of the 1,065,454 immigrant persons of British birth, 369,724 were rural and 695,730 urban residents, or 34.70 p.c. rural and 65.30 p.c., or nearly two-thirds, urban.

Of the 890,282 foreign-born, 483,615 or 54.32 p.c. were resident in rural districts and 406,667 or 45.68 p.c. in urban communities. Immigrants from Norway, Sweden, Denmark and Galicia are found more largely in rural communities than in urban ones. Also, out of 374,024 persons born in the United States, 214,563, or 57.36 p.c., are rural residents. On the other hand only a small proportion of persons born in Greece (10.67 p.c.), in Italy (24.19 p.c.) or in Poland, exclusive of Galicia, (32.70 p.c.) are found outside of cities or towns. The great majority of Asiatics resident in Canada are dwellers in cities and towns, the only exception being the Japanese immigrants, of whom 61.84 p.c. reside in communities outside of cities and towns. The greater number of Japanese so classified are engaged in truck gardening in suburban areas, and in fishing on the Pacific coast.

29.—Distribution of the Immigrant Population Residing in Rural and Urban Localities, by Birthplace and Sex, Census 1921.

Birthplaces.	Immigrant Population.								
	Male.			Female.			Both Sexes.		
	Rural.	Urban.	Total.	Rural.	Urban.	Total.	Rural.	Urban.	Total.
British-Born	211,815	355,257	567,072	157,909	349,473	498,382	369,724	695,730	1,065,454
British Isles	205,991	339,546	545,531	154,019	325,571	479,590	360,010	665,111	1,025,121
England.....	139,905	225,773	365,678	105,869	215,116	320,985	245,774	440,889	686,663
Ireland.....	17,701	32,011	49,712	12,205	31,384	43,589	29,905	63,395	93,301
Scotland.....	43,659	75,682	119,341	33,036	74,106	107,142	76,695	149,788	226,483
Wales.....	3,521	4,352	7,873	2,240	3,666	5,906	5,761	8,018	13,779
Lesser Isles.....	1,172	1,696	2,868	656	1,283	1,939	1,828	2,979	4,807
Country not stated.....	33	26	59	13	16	29	46	42	88
British Possessions	5,651	15,511	21,162	3,786	14,732	18,518	9,437	30,243	39,680
Australia.....	665	952	1,617	449	789	1,238	1,114	1,741	2,855
India.....	1,317	1,265	2,582	487	779	1,266	1,804	2,044	3,848
Newfoundland.....	2,222	9,151	11,373	1,850	9,884	11,734	4,072	19,035	23,107
New Zealand.....	310	303	613	214	258	472	524	561	1,085
South Africa.....	366	534	900	329	531	860	695	1,065	1,760
West Indies.....	389	2,055	2,444	218	1,608	1,826	607	3,663	4,270
Other.....	382	1,251	1,633	239	883	1,122	621	2,134	2,755
Foreign-Born	291,500	227,964	519,476	192,109	178,703	370,812	483,615	406,667	890,282
Europe	153,814	120,078	273,892	95,378	99,658	195,036	249,192	210,136	459,328
Austria.....	22,383	11,651	34,034	14,824	8,677	23,501	37,207	20,328	57,535
Belgium.....	4,673	2,877	7,550	3,207	2,519	5,726	7,880	5,396	13,276
Bulgaria.....	412	477	889	62	54	116	474	531	1,005
Czechoslovakia.....	1,548	981	2,529	984	809	1,793	2,532	1,790	4,322
Denmark.....	3,503	1,429	4,932	1,424	836	2,260	4,927	2,265	7,192
Finland.....	5,283	2,144	7,427	2,824	1,905	4,729	8,107	4,049	12,156
France.....	5,318	5,133	10,451	3,850	4,948	8,798	9,168	10,081	19,249
Galicia.....	15,704	5,101	20,805	11,536	3,684	15,220	27,240	8,785	36,025
Germany.....	9,315	4,946	14,261	6,542	4,463	11,005	15,857	9,409	25,266
Greece.....	356	2,748	3,106	44	619	663	402	3,367	3,769
Holland.....	2,145	1,344	3,489	1,299	1,040	2,339	3,444	2,384	5,828
Hungary.....	2,684	1,467	4,146	1,999	1,348	3,347	4,683	2,810	7,493
Iceland.....	2,251	1,115	3,366	1,979	1,431	3,410	4,230	2,546	6,776
Italy.....	6,787	17,432	24,219	1,808	9,504	11,312	8,595	26,936	35,531
Jugo-Slavia.....	779	667	1,446	200	300	500	979	967	1,946
Norway.....	11,798	2,986	14,784	6,273	2,070	8,343	18,071	5,056	23,127
Poland.....	6,031	10,833	16,864	3,543	8,872	12,415	9,574	19,705	29,279
Rumania.....	6,714	6,514	13,228	4,421	5,130	9,551	11,135	11,644	22,779
Russia.....	25,968	30,999	56,967	18,246	25,842	44,088	44,214	56,841	101,055
Sweden.....	14,083	4,051	18,134	6,802	2,764	9,566	20,885	6,815	27,700
Switzerland.....	1,296	907	2,203	630	646	1,276	1,926	1,553	3,479
Ukraine.....	4,056	2,886	6,942	2,548	1,867	4,415	6,604	4,753	11,357
Other.....	725	1,395	2,120	333	730	1,063	1,058	2,125	3,183

29.—Distribution of the Immigrant Population Residing in Rural and Urban Localities, by Birthplace and Sex, Census 1921—concluded.

Birthplaces.	Immigrant Population.								
	Male.			Female.			Both Sexes.		
	Rural.	Urban.	Total.	Rural.	Urban.	Total.	Rural.	Urban.	Total.
Foreign-Born—con.									
Asia.....	16,263	39,948	47,211	2,242	4,183	6,425	18,585	35,131	53,636
China.....	10,243	25,476	35,719	222	983	1,205	10,465	26,459	36,924
Japan.....	5,407	2,891	8,298	1,797	1,555	3,352	7,204	4,446	11,650
Syria.....	428	1,967	2,395	153	1,331	1,484	581	3,298	3,879
Turkey.....	46	237	283	16	102	118	62	339	401
Other.....	139	377	516	54	212	266	193	589	782
United States.....	120,617	75,810	196,427	93,946	83,651	177,597	214,563	159,461	374,024
West Indies.....	9	44	53	17	53	70	26	97	123
Other Countries.....	803	1,084	1,887	526	758	1,284	1,329	1,842	3,171
At Sea.....	173	206	379	104	170	274	277	376	653
Total Immigrant Born.....	593,321	583,221	1,086,542	359,018	519,176	869,194	853,339	1,192,397	1,955,736

9.—Rural and Urban Population.

In Table 30 are given statistics showing the growth of rural and urban population respectively since 1891. For the purposes of the census, the population residing in cities, towns and incorporated villages has been defined as urban, and that outside of such localities as rural. Thus the distinction here made between "rural" and "urban" population is a distinction of provincial legal status rather than of size of aggregations of population within limited areas. Since the laws of the various provinces differ in regard to the population necessary before a municipality may be incorporated as urban (the laws of Saskatchewan, for example, making provision that 50 people actually resident on an area not greater than 640 acres may claim incorporation as a village, while the Ontario law now requires that villages asking for incorporation shall have a population of 750 on an area not exceeding 500 acres), the line of demarcation between rural and urban population is not uniformly drawn throughout the Dominion, as far as comparable aggregations of population are concerned. To a limited extent, however, Table 32 will permit the student of population statistics to make, at least for Canada as a whole, his own line of demarcation between rural and urban population.¹

¹ In the United States, urban population is classified by the Census Bureau as that residing in cities and other incorporated places having 2,500 inhabitants or more, and in "towns" having 2,500 inhabitants or more in Massachusetts, New Hampshire and Rhode Island. While such "towns", under the forms of local government existing in these states, are partly rural in character, the United States Census Bureau considers that the total urban population of these states, is not greatly exaggerated thereby.

While a summary comparison between urbanization in Canada in 1921 and in the United States in 1920 would lead us to the conclusion that our country, though far less densely peopled than the United States, had an almost equally large percentage of its population in urban communities, viz., 49.52 p.c. in Canada as compared with 51.4 p.c. in the United States, the fact that in the United States inhabitants of places having under 2,500 population are included with rural population, while in Canada the inhabitants of many places with less than 100 population are classed as urban, must be taken into account. A fairer basis of comparison is secured if the same population limits are taken for both countries, as may be done by using Table 32. Thus, at the census of 1920, the United States had 25.9 p.c. of its population resident in cities of 100,000 and over, while Canada in 1921 had only 18.87 p.c. of its population in such places. The United States has an additional 16.4 p.c. of its population residing in cities of between 10,000 and 100,000 population, and 4.7 p.c. in cities and towns of 5,000 to 10,000, while Canada had in cities of these categories only 13.32 p.c. and 4.36 p.c. respectively of its population. Thus, taking all places of 5,000 and over—the lowest population for which comparative figures are readily available—47 p.c. of the population of the United States resided in such places as compared with 36.55 p.c. of the population of Canada, showing the much higher degree of urbanization which has been reached in the United States—a natural thing in an older settled and more densely peopled country.

On the basis of the census classification, it is apparent from Table 30 that in the last decade, as in the previous one, urban communities absorbed somewhat over two-thirds of the total increase in population, with the result that the urban population of Canada was in 1921 nearly equal to the rural. Out of every 1,000 persons in the country, 505 were resident, on June 1, 1921, in rural and 495 in urban communities, as compared with 545 in rural and 455 in urban communities on June 1, 1911, 625 in rural and 375 in urban communities in 1901, and 682 in rural and 318 in urban communities in 1891.

From Table 32, showing the distribution of urban population in Canada by size of cities and towns, it becomes evident that for the first time in its census history Canada possesses cities of more than half a million population. These are Montreal and Toronto, with 618,506 and 521,893 inhabitants respectively, the former having in its neighbourhood several "satellite" cities, Verdun, Westmount, Lachine, Outremont, which, with other smaller towns in its vicinity, bring the population of "Greater Montreal" to the 700,000 mark. No other city has attained the 200,000 mark, but during the past decade Hamilton and Ottawa have been added to Winnipeg and Vancouver as cities of over 100,000 population, while Quebec, which in 1911, was, together with Hamilton and Ottawa, in the 50,000 to 100,000 class, has been joined in that class, though at a considerable interval, by Calgary, London, Edmonton and Halifax. In the 25,000 to 50,000 class, there were in 1921 the seven cities of St. John, Victoria, Windsor, Regina, Brantford, Saskatoon and Verdun. Details of the population of these and other smaller cities and towns of 5,000 and over, are given by censuses from 1871 to 1921 in Table 34, while the populations of urban communities having a population of from 1,000 to 5,000 in 1921 are given for 1901, 1911 and 1921 in Table 35.

**30.—Rural and Urban Population by Provinces and Territories,
1891, 1901, 1911 and 1921.**

Provinces.	1891.		1901.	
	Rural.	Urban.	Rural.	Urban.
Prince Edward Island.....	94,823	14,255	88,304	14,955
Nova Scotia.....	373,403	76,993	330,191	129,383
New Brunswick.....	272,362	48,901	253,835	77,285
Quebec.....	988,820	499,715	994,833 ⁵	654,065 ⁵
Ontario.....	1,295,823	818,998	1,246,969	935,978
Manitoba.....	111,498	41,008	184,775 ³	70,436 ³
Saskatchewan.....	1	—	77,013 ³	14,266 ³
Alberta.....	1	—	54,489 ²	18,533 ²
British Columbia.....	60,945	37,228	88,478	90,179
Yukon Territory.....	1	—	18,077	9,142
Northwest Territories.....	1	—	20,129	—
Royal Canadian Navy.....	—	—	—	—
Canada.....	3,296,141	1,537,098	3,357,093	2,014,222

Provinces.	1911.		1921.		Numerical increase in decade 1911-21.	
	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.
Prince Edward Island.....	78,758	14,970	69,522	19,093	—9,236	4,123
Nova Scotia.....	306,210	186,128	296,799	227,038	—9,411	40,910
New Brunswick.....	252,342	99,547	263,432	124,444	11,090	24,897
Quebec.....	1,038,934 ⁵	966,842 ⁵	1,038,630	1,322,569	— 304	355,727
Ontario.....	1,198,803 ⁴	1,328,489	1,227,030	1,706,632	28,227	378,143
Manitoba.....	261,029 ⁴	200,365	348,502	261,616	87,473	61,251
Saskatchewan.....	361,037 ³	181,395 ³	538,552	218,958	177,515	87,563
Alberta.....	236,633 ²	137,662 ²	365,550	222,904	128,917	85,242
British Columbia.....	188,796	203,684	277,020	247,562	88,224	43,878
Yukon Territory.....	4,647	3,865	2,851	1,306	—1,796	—2,559
Northwest Territories.....	6,507 ⁴	—	7,988	—	1,481	—
Royal Canadian Navy.....	—	—	485	—	485	—
Canada.....	3,933,696	3,272,947	4,436,361	4,352,122	502,665	1,079,175

¹ The population (98,967) in territory now comprised in the provinces of Alberta, Saskatchewan and in the Yukon and Northwest Territories was classified as rural in the census of 1891. ² Volume 1, Census 1911, places the urban population of Alberta for that year at 141,937. Included in this figure was the population (5,250) of twelve places which, according to the Report of the Municipal Commissioner for Alberta, were not then incorporated. The places so included were Aetna, Bankhead, Bellevue, Bickerdike, Canmore, Cardiff, Exshaw, Hillcrest, Passburg, Queenston and Elmpark. The correction resulting from this and from other small adjustments consequent upon more definite knowledge as to incorporated areas, places the urban population for 1911 at 137,662. Similar corrections have been made in the urban and rural figures for the census of 1901. ³ As corrected in Census Report, Prairie Provinces, 1916. ⁴ As changed by Extension of Boundaries Act, 1912. ⁵ The urban population of 970,791 shown in Volume 1, Census 1911, is reduced to 966,842 by the transfer of the population of Maniwaki, Martinville, Moisie, St. Bruno, St. Martin and St. Vincent de Paul from urban to rural; by adjustments in area of the villages of Ste. Anne and Ste. Geneviève; and Extension of Boundaries Act, 1912.

31.—Percentage Distribution of Rural and Urban Population by Provinces and Territories, 1891, 1901, 1911 and 1921.

Provinces.	1891.		1901.	
	Rural.	Urban.	Rural.	Urban.
Prince Edward Island.....	p.c. 86·93	p.c. 13·07	p.c. 85·52	p.c. 14·48
Nova Scotia.....	82·91	17·09	71·85	28·15
New Brunswick.....	84·78	15·22	76·66	23·34
Quebec.....	66·43	33·57	60·33	39·67
Ontario.....	61·26	38·74	57·12	42·88
Manitoba.....	73·11	26·89	72·40	27·60
Saskatchewan.....	1	—	84·37	15·63
Alberta.....	1	—	74·62	25·38
British Columbia.....	62·08	37·92	49·52	50·48
Yukon Territory.....	1	—	66·41	33·59
Northwest Territories.....	1	—	100·00	—
Royal Canadian Navy.....	—	—	—	—
Canada.....	68·20	31·80	62·50	37·50

Provinces.	1911.		1921.	
	Rural.	Urban.	Rural.	Urban.
Prince Edward Island.....	p.c. 84·03	p.c. 15·97	p.c. 78·45	p.c. 21·55
Nova Scotia.....	62·20	37·80	56·66	43·34
New Brunswick.....	71·71	28·29	67·92	32·08
Quebec.....	51·80	48·20	43·99	56·01
Ontario.....	47·43	52·57	41·83	58·17
Manitoba.....	56·57	43·43	57·12	42·88
Saskatchewan.....	73·32	26·68	71·10	28·90
Alberta.....	63·22	36·78	62·12	37·88
British Columbia.....	48·10	51·90	52·81	47·19
Yukon Territory.....	54·59	45·41	68·58	31·42
Northwest Territories.....	100·00	—	100·00	—
Royal Canadian Navy.....	—	—	100·00	—
Canada.....	54·58	45·42	50·48	49·52

NOTE.—In the use of this table, reference should be made to the notes appended to the preceding table showing rural and urban population by numbers.

¹ The population in the territory now comprised in the Provinces of Alberta and Saskatchewan and the Yukon and Northwest Territories was classified as rural in the census of 1891.

32.—Urban Population of Canada, divided by Size of Municipality Groups, 1901, 1911 and 1921.

In Cities and Towns of	1901.			1911.			1921.		
	Number of Places.	Population.	Per cent of Total Pop.	Number of Places.	Population.	Per cent of Total Pop.	Number of Places.	Population.	Per cent of Total Pop.
Over 500,000.....	—	—	—	—	—	—	2	1,140,399	12.97
Between—									
400,000 and 500,000	—	—	—	1	470,480	6.53	—	—	—
300,000 and 400,000	—	—	—	1	376,538	5.22	—	—	—
200,000 and 300,000	2	475,770	8.86	—	—	—	—	—	—
100,000 and 200,000	—	—	—	2	236,436	3.28	4	518,298	5.90
50,000 and 100,000	3	181,402	3.38	3	247,741	3.44	5	336,650	3.83
25,000 and 50,000	5	188,869	3.52	6	241,007	3.34	7	239,096	2.72
15,000 and 25,000	3	55,499	1.03	13	237,551	3.30	19	370,990	4.22
10,000 and 15,000	8	95,266	1.77	18	221,322	3.07	18	224,033	2.55
5,000 and 10,000	37	275,919	5.14	46	323,056	4.48	54	382,762	4.36
3,000 and 5,000	50	190,789	3.55	60	226,212	3.14	73	276,026	3.14
1,000 and 3,000	187	320,433	5.97	251	429,553	5.97	292	489,461	5.57
500 and 1,000	179	100,238	2.42	247	180,784	2.51	—	—	—
Under 500.....	—	107,614	2.00	—	90,284	1.25	—	374,727	4.26
Total.....	—	2,021,799	37.64	—	3,280,964	45.53	—	4,352,402	49.52

32.—Ratio of Males to Females in Rural and Urban Populations, 1921.

Provinces.	Rural.	Urban.	Provinces.	Rural.	Urban.
	p.c.	p.c.		p.c.	p.c.
Prince Edward Island.....	107	89	Alberta.....	134	106
Nova Scotia.....	108	98	British Columbia.....	131	115
New Brunswick.....	109	92	Yukon Territory.....	219	195
Quebec.....	107	94	N.W. Territories.....	107	—
Ontario.....	113	95			
Manitoba.....	119	101	Canada, 1921.....	116	97
Saskatchewan.....	126	107			

34.—Population of Cities and Towns having over 5,000 inhabitants in 1921, compared with 1871-81-91-1901-11.

NOTE.—The cities and towns in which a Board of Trade exists are indicated by an asterisk (*). In all cases the population is for the city or town municipality as it existed in 1921.

Cities and Towns.	Provinces.	Population.					
		1871.	1881.	1891.	1901.	1911.	1921.
*Montreal.....	Quebec.....	115,000	155,238	219,616	328,172	490,504 ¹	618,506
*Toronto.....	Ontario.....	59,000	96,196	181,215	209,892	381,833 ²	521,893
*Winnipeg.....	Manitoba.....	241	7,985	25,639	42,340	136,035	179,087
*Vancouver.....	British Columbia.....	—	—	13,709	27,010	100,401	117,217
*Hamilton.....	Ontario.....	26,880	36,661	48,959	52,634	81,969	114,151
*Ottawa.....	".....	24,141	31,307	44,154	59,928	87,062	107,843
*Quebec.....	Quebec.....	59,699	62,446	63,090	68,840	78,710	95,193
*Calgary.....	Alberta.....	—	—	3,876	4,392	43,704	63,305
*London.....	Ontario.....	18,000	26,266	31,977	37,976	46,300	60,959
*Edmonton.....	Alberta.....	—	—	—	4,176	31,064 ³	58,821
*Halifax.....	Nova Scotia.....	29,582	36,100	38,437	40,832	46,619	58,372
*St. John.....	New Brunswick.....	41,325	41,353	39,179	40,711	42,511	47,166
*Victoria.....	British Columbia.....	3,270	5,925	16,841	20,919	31,660	38,727
*Windsor.....	Ontario.....	4,253	6,561	10,322	12,153	17,829	38,591
*Regina.....	Saskatchewan.....	—	—	—	2,249	30,213	34,432
*Brantford.....	Ontario.....	8,107	9,616	12,753	16,619	23,132	29,440
*Saskatoon.....	Saskatchewan.....	—	—	—	113	12,004	25,739
Verdun.....	Quebec.....	—	278	296	1,898	11,629	25,001
*Hull.....	".....	3,800	6,890	11,264	13,993	18,222	24,117

34.—Population of Cities and Towns having over 5,000 inhabitants in 1921,
compared with 1871-81-91-1901-11.—continued.

Cities and Towns.	Provinces.	Population.					
		1871.	1881.	1891.	1901.	1911.	1921.
*Sherbrooke.....	Quebec.	4,432	7,227	10,110	11,765	16,405	23,515
*Sydney.....	Nova Scotia.....	—	1,480	2,427	9,909	17,723	22,545
*Three Rivers.....	Quebec.....	7,570	8,670	8,334	9,981	13,691	22,367
*Kitchener.....	Ontario.....	2,743	4,054	7,425	9,747	15,196	21,763
*Kingston.....	"	12,407	14,091	19,263	17,961	18,874	21,753
*Sault Ste. Marie.....	"	879	780	2,414	7,169	14,020	21,092
*Peterborough.....	"	4,611	6,812	9,717	12,886	18,360	20,994
*Fort William.....	"	—	—	—	3,633	16,499	20,541
*St. Catharines.....	"	7,864	9,631	9,170	9,946	12,484	19,881
*Moose Jaw.....	Saskatchewan.....	—	—	—	1,558	13,823	19,285
*Guelph.....	Ontario.....	6,878	9,890	10,537	11,496	15,175	18,128
*Westmount.....	Quebec.....	200	884	3,076	8,856	14,579	17,593
*Moncton.....	New Brunswick.....	600	5,032	8,762	9,026	11,345	17,488
*Glace Bay.....	Nova Scotia.....	—	—	2,459	6,945	16,562	17,007
*Stratford.....	Ontario.....	4,313	8,239	9,500	9,959	12,946	16,094
*St. Thomas.....	"	2,197	8,367	10,366	11,485	14,054	16,026
*Lachine.....	Quebec.....	1,696	2,406	3,761	6,365	11,688	15,404
*Brandon.....	Manitoba.....	—	—	3,778	5,620	13,839	15,397
*Port Arthur.....	Ontario.....	—	—	—	3,214	11,220	14,886
*Sarnia.....	"	2,929	3,874	6,602	8,176	9,947	14,877
*Niagara Falls.....	"	1,600	2,347	3,349	5,702	9,248	14,764
*New Westminster.....	British Columbia.....	—	1,500	6,678	6,499	13,199	14,495
*Chatham.....	Ontario.....	5,873	7,873	9,052	9,068	10,770	13,256
*Outremont.....	Quebec.....	—	387	795	1,148	4,820	13,249
*Galt.....	Ontario.....	3,827	5,187	7,535	7,866	10,209	13,216
*St. Boniface.....	Manitoba.....	—	1,283	1,553	2,019	7,483	12,821
*Charlottetown and Royalty.....	P. E. Island.....	8,807	11,485	11,373	12,080	11,263	12,347
*Belleville.....	Ontario.....	7,305	9,516	9,916	9,117	9,876	12,206
*Owen Sound.....	"	3,369	4,426	7,497	8,776	12,558	12,190
*Oshawa.....	"	3,185	3,992	4,066	4,394	7,436	11,940
*Lethbridge.....	Alberta.....	—	—	—	2,072	9,035	11,097
*St. Hyacinthe.....	Quebec.....	3,746	5,321	7,016	9,210	9,797	10,859
*North Bay.....	Ontario.....	—	—	—	2,530	7,737	10,692
*Shawinigan Falls.....	Quebec.....	—	—	—	—	4,265	10,625
*Lévis.....	"	6,691	7,597	7,301	9,242	8,703	10,470
*Brockville.....	Ontario.....	5,102	7,609	8,791	8,940	9,374	10,043
*Amherst.....	Nova Scotia.....	—	2,274	3,781	4,964	8,973	9,998
*Woodstock.....	Ontario.....	3,982	5,373	8,612	8,833	9,320	9,935
*Medicine Hat.....	Alberta.....	—	—	—	1,570	5,608	9,634
*Valleyfield.....	Quebec.....	1,800	3,906	5,515	11,055	9,440	9,215
*Joliette.....	"	3,047	3,268	3,347	4,220	6,346	9,113
*Nanaimo and suburbs.....	British Columbia.....	—	1,645	4,595	6,130	8,306	9,088
*New Glasgow.....	Nova Scotia.....	—	2,595	3,776	4,447	6,383	8,974
*Chicoutimi.....	Quebec.....	1,393	1,935	2,277	3,826	5,880	8,937
*Welland.....	Ontario.....	1,110	1,870	2,035	1,863	5,318	8,654
*Sudbury.....	"	—	—	—	2,027	4,150	8,621
*Sydney Mines.....	Nova Scotia.....	—	2,340	2,442	3,191	7,470	8,327
*Sorel.....	Quebec.....	5,636	5,791	6,669	7,057	8,420	8,174
*Fredericton.....	New Brunswick.....	6,006	6,218	6,502	7,117	7,208	8,114
*Dartmouth.....	Nova Scotia.....	—	3,786	6,252	4,806	5,058	7,899
*Theftford Mines.....	Quebec.....	—	—	—	3,256	7,261	7,886
*Pembroke.....	Ontario.....	1,508	2,820	4,401	5,156	5,626	7,875
*St. Johns.....	Quebec.....	3,022	4,314	4,722	4,030	5,903	7,734
*Rivière du Loup.....	"	1,541	2,291	4,175	4,569	6,774	7,703
*North Vancouver.....	British Columbia.....	—	—	—	—	8,196	7,652
*Orillia.....	Ontario.....	1,322	2,910	4,752	4,907	6,828	7,631
*Grand'Mère.....	Quebec.....	—	—	—	2,511	4,783	7,631
*Lindsay.....	Ontario.....	4,049	5,080	6,081	7,003	6,964	7,620
*Truro.....	Nova Scotia.....	—	3,461	5,102	5,993	6,107	7,562
*Prince Albert.....	Saskatchewan.....	—	—	—	1,785	6,254	7,558
*Cornwall.....	Ontario.....	2,033	4,468	6,805	6,740	6,598	7,419
*Yarmouth.....	Nova Scotia.....	2,500	3,485	6,089	6,430	6,600	7,073
*Walkerville.....	Ontario.....	—	—	—	1,595	3,302	7,059
*Midland.....	"	—	1,095	2,088	3,174	4,663	7,016
*Barrie.....	"	3,398	4,854	5,550	5,949	8,420	6,936
*Smith Falls.....	"	1,150	2,087	3,864	5,155	6,370	6,790
*Granby.....	Quebec.....	876	1,040	1,710	3,773	4,785	6,785
*Portage la Prairie.....	Manitoba.....	—	—	3,363	3,901	5,892	6,766
*Cap Magdeleine.....	Quebec.....	—	—	—	—	—	6,738
*North Sydney.....	Nova Scotia.....	—	1,520	2,513	4,466	5,418	6,585
*Prince Rupert.....	British Columbia.....	—	—	—	—	4,184	6,993
*Trenton.....	Ontario.....	1,796	3,042	4,363	4,217	3,988	5,902
*Waterloo.....	"	1,594	2,066	2,941	3,537	4,359	5,883

34.—Population of Cities and Towns having over 5,000 inhabitants in 1921, compared with 1871-81-91-1901-11.—concluded.

Cities and Towns.	Provinces.	Population.					
		1871.	1881.	1891.	1901.	1911.	1921.
*Collingwood.....	Ontario.....	2,829	4,445	4,939	5,755	7,090	5,882
Ford City.....	"	—	—	—	—	—	5,870
Springhill.....	Nova Scotia.....	—	900	4,813	4,559	5,713	5,681
New Waterford.....	"	—	—	—	—	—	5,615
La Tuque.....	Quebec.....	—	—	—	—	2,934	5,603
*Campbellton.....	New Brunswick.....	—	—	—	2,652	3,817	5,570
*Hawkesbury.....	Ontario.....	1,671	1,920	2,042	4,150	4,400	5,544
*St. Jérôme.....	Quebec.....	1,159	2,032	2,868	3,619	3,473	5,491
*Preston.....	Ontario.....	1,408	1,419	1,843	2,308	3,883	5,423
*Kenora.....	"	—	—	1,806	5,202	6,158	5,407
*Cobourg.....	"	4,442	4,957	4,829	4,239	5,074	5,327
Eastview.....	"	—	—	—	776	3,169	5,324
Stellarton.....	Nova Scotia.....	—	—	—	2,335	3,910	5,312
Nelson.....	British Columbia.....	—	—	—	5,273	4,476	5,230
Magog.....	Quebec.....	—	—	2,100	3,516	3,978	5,159
*Yorkton.....	Saskatchewan.....	—	—	—	700	2,309	5,151
Ingersoll.....	Ontario.....	4,022	4,318	4,191	4,573	4,763	5,150

*Includes Maisonneuve, Cartierville, Bordeau and Sault-au-Récollet. *Includes North Toronto, less 67 in 1911 transferred to Township of York. *Includes town of Strathcona and villages of North and West Edmonton. *Includes town of Steelton. *Includes parish of Lachine and Summerlea town. *Includes Notre-Dame de la Victoire. *Includes North Vancouver District. *Includes suburbs in 1901. *The town of Galt has a Chamber of Commerce, as distinct from a Board of Trade.

35.—Population of Towns and Villages having between 1,000 and 5,000 inhabitants in 1921, as compared with 1901 and 1911.

Towns and Villages.	1901.	1911.	1921.	Towns and Villages.	1901.	1911.	1921.
Prince Edward Island.				New Brunswick—concluded.			
Summerside.....	2,875	2,678	3,228	Grand Falls.....	644	1,280	1,327
Souris.....	1,140	1,089	1,094	Sunny Brae.....	—	—	1,171
Nova Scotia.				Richibucto.....	100	871	1,158
Westville.....	3,471	4,417	4,550	St. George.....	733	988	1,110
Windsor.....	3,398	3,452	3,591	St. Andrews.....	1,064	987	1,065
Bridgewater.....	2,203	2,775	3,147	Quebec.			
Pictou.....	3,235	3,179	2,988	Lauzon.....	3,416	3,978	4,966
Inverness.....	306	2,719	2,963	Jonquière.....	—	2,354	4,851
Trenton.....	2,976	1,749	2,844	Longueuil (city).....	2,835	3,972	4,682
Lunenburg.....	1,214	2,681	2,702	Montmagny.....	1,919	2,617	4,145
Parrsboro.....	3,391	2,856	2,748	St. Lambert.....	1,362	3,344	3,890
Kentville.....	1,731	2,300	2,717	Buckingham.....	2,936	3,851	3,835
Dominion.....	1,516	2,580	2,300	East Angus.....	—	—	3,802
Liverpool.....	1,937	2,109	2,294	Victoriaville.....	1,693	3,028	3,759
Antigonish.....	1,838	1,787	1,746	Rimouski.....	1,804	3,097	3,612
Wolfville.....	1,412	1,458	1,743	Coaticook.....	2,880	3,165	3,554
Joggins.....	1,088	1,648	1,732	St. Pierre.....	505	2,201	3,535
Canso.....	1,479	1,617	1,626	Farnham.....	3,114	3,560	3,343
Wedgeport.....	1,026	1,392	1,424	Beausport.....	—	—	3,240
Oxford.....	1,285	1,392	1,402	St. Laurent.....	1,390	1,860	3,232
Shelburne.....	1,445	1,435	1,360	Mégantic.....	2,171	2,816	3,140
Digby.....	1,150	1,247	1,230	St. Jérôme de Matane.....	1,176	2,056	3,050
Mahone Bay.....	866	951	1,177	Ste. Thérèse.....	1,541	2,120	3,043
Louisburg.....	1,046	1,006	1,152	Aylmer.....	2,291	3,104	2,970
Bridgetown.....	858	996	1,086	Drummondville.....	1,450	1,725	2,852
New Brunswick.				Ste. Agathe des Monts.....	1,073	2,020	2,812
Chatham.....	4,868	4,666	4,506	Mont Joli.....	822	2,141	2,799
Edmundston.....	—	1,821	4,035	Black Lake.....	1,316	2,645	2,656
Newcastle.....	2,507	2,945	3,507	Pointe Claire St. Joachim.....	555	793	2,617
St. Stephen.....	2,840	2,836	3,452	Bromptonville.....	—	1,239	2,603
Woodstock.....	3,644	3,856	3,380	Lachute.....	2,022	2,407	2,592
Bathurst.....	1,044	960	3,327	Kenogami.....	—	—	2,557
Sussex.....	1,398	1,906	2,198	Iberville.....	1,512	1,905	2,454
Sackville.....	1,444	2,039	2,173	Richmond.....	2,057	2,175	2,450
Milltown.....	2,044	1,804	1,976	Nicolet.....	2,225	2,593	3,342
Shediac.....	1,075	1,442	1,973	Windsor.....	2,149	2,233	2,330
Dalhousie.....	862	1,650	1,958	Baie St. Paul.....	1,408	1,857	2,291
Devon.....	—	—	1,924	Beauharnois.....	1,976	2,015	2,250
Marysville.....	1,892	1,837	1,614	Ste. Anne de Bellevue.....	1,343	1,416	2,212
				Mont-Laurier.....	—	752	2,211
				Bagotville.....	507	1,011	2,204

35.—Population of Towns and Villages having between 1,000 and 5,000 inhabitants in 1921, as compared with 1901 and 1911.—continued.

Towns and Villages.	1901.	1911.	1921.	Towns and Villages.	1901.	1911.	1921.
Quebec—concluded.				Ontario.			
Berthier.....	1,364	1,335	2,193	Dundas.....	3,173	4,299	4,978
Asbestos.....	783	2,224	2,189	Renfrew.....	3,153	3,846	4,906
Laprairie.....	1,451	2,385	2,158	Thorold.....	1,979	2,273	4,825
Roberval.....	1,248	1,737	2,068	Brampton.....	2,748	3,412	4,527
Loretteville.....	1,555	1,588	2,066	Port Hope.....	4,188	5,092	4,456
Waterloo.....	1,797	1,886	2,063	Cobalt.....	—	5,638	4,449
Terrebonne.....	1,822	1,990	2,056	Sandwich.....	1,450	2,300	4,415
Plessisville.....	1,586	1,559	2,032	Paris.....	3,229	4,098	4,368
Laval des Rapides.....	—	—	1,989	Sturgeon Falls.....	1,418	2,199	4,125
Pointe Gatineau.....	1,583	1,751	1,919	Goderich.....	4,158	4,522	4,107
Montmorency.....	—	1,717	1,904	Arnprior.....	4,152	4,405	4,077
Malbaie.....	826	1,449	1,883	Penetanguishene.....	2,422	3,568	4,037
Montreal West.....	352	703	1,882	Wallaceburg.....	2,763	3,438	4,006
Ste. Rose.....	1,154	1,480	1,811	Simcoe.....	2,627	3,227	3,953
Saindon.....	—	—	1,793	St. Marys.....	3,384	3,388	3,847
St. Tite.....	991	1,438	1,783	Timmins.....	—	—	3,843
Montreal East.....	—	—	1,776	Carleton Place.....	4,059	3,621	3,841
Louiseville.....	1,565	1,675	1,777	Perth.....	3,588	3,588	3,790
Point-aux-Trembles.....	—	1,167	1,764	Mimico.....	437	1,733	3,751
Chandler.....	—	—	1,756	Haileybury.....	—	3,874	3,743
Marieville.....	1,306	1,587	1,748	Leamington.....	2,451	2,652	3,675
Grande Baie.....	—	1,355	1,735	Newmarket.....	2,125	2,996	3,626
Sacré Cœur de Jésus.....	206	996	1,709	Gananoque.....	3,526	3,804	3,604
St. Raymond.....	1,272	1,653	1,693	Parry Sound.....	2,884	3,429	3,546
Bedford.....	1,364	1,432	1,669	Rockland.....	1,998	3,397	3,496
St. Gabriel de Brandon.....	1,199	1,602	1,667	Port Colborne.....	1,253	1,624	3,415
St. Joseph (Richelieu).....	647	1,416	1,658	Pictou.....	3,698	3,564	3,356
Ste. Anne de Beaupré.....	847	2,066	1,648	Oakville.....	1,643	2,372	3,298
Disraeli.....	1,018	1,606	1,646	Bowmanville.....	2,731	2,814	3,233
Lennoxville.....	1,120	1,211	1,554	Dunnville.....	2,105	2,861	3,224
Acton Vale.....	1,175	1,402	1,549	Weston.....	1,083	1,875	3,166
St. Marc-des-Carrières.....	296	1,224	1,492	Petrolia.....	4,135	3,518	3,148
Amos.....	—	—	1,488	Fort Frances.....	697	1,611	3,109
Dorval.....	481	1,005	1,466	Napanee.....	3,143	2,807	3,038
Bienville.....	851	1,004	1,462	Tilsonburg.....	2,241	2,758	2,974
St. Casimir.....	—	—	1,457	Campbellford.....	2,485	3,051	2,890
Trois-Pistoles.....	—	—	1,451	Whitby.....	2,110	2,248	2,800
Beauceville.....	—	1,677	1,448	Hanover.....	1,392	2,342	2,781
St. Joseph (Beauce).....	1,117	1,440	1,445	Hespeler.....	2,457	2,368	2,777
Rock Island.....	615	861	1,442	Amherstburg.....	2,222	2,560	2,769
Pont Rouge.....	—	—	1,419	Burlington.....	1,119	3,81	3,709
Beloil.....	702	1,501	1,418	Strathroy.....	2,933	3,823	2,691
St. Benoît Joseph Labre.....	—	1,070	1,416	New Toronto.....	209	686	2,669
Huntingdon.....	1,122	1,265	1,401	Cochrane.....	—	1,715	2,655
Pierreville.....	1,108	1,363	1,394	Meaford.....	1,916	2,811	2,650
Montreal North.....	—	—	1,360	Prescott.....	3,019	2,801	2,636
Lac-au-Saumon.....	—	1,171	1,354	Copper Cliff.....	2,500	3,082	2,597
St. Jacques.....	—	—	1,332	Merriton.....	1,710	1,670	2,544
L'Assomption.....	1,605	1,747	1,320	Listowel.....	2,693	2,289	2,477
Ste. Marie.....	—	—	1,311	Bracebridge.....	2,479	2,776	2,451
St. Félicien.....	—	581	1,306	Almonte.....	3,023	2,452	2,426
Courville.....	—	—	1,293	Bridgeburg.....	1,356	1,770	2,401
Danville.....	1,017	1,331	1,290	Portsmouth.....	1,827	1,786	2,351
Charlesbourg.....	—	—	1,267	Walkerton.....	2,971	2,601	2,344
Giffard.....	—	—	1,254	Aurora.....	1,590	1,901	2,307
Arthabaska.....	995	1,458	1,234	New Liskeard.....	—	2,108	2,268
Donnacona.....	—	—	1,225	Huntsville.....	2,152	2,358	2,246
Baie Shawingan.....	—	1,024	1,213	Alexandria.....	1,911	2,323	2,195
Port Alfred.....	—	—	1,213	Aylmer.....	2,204	2,102	2,194
Almaville.....	—	—	1,174	Orangeville.....	2,511	2,340	2,187
Laurentides.....	934	1,128	1,150	Wingham.....	2,392	2,238	2,092
Como.....	628	898	1,146	Kincardine.....	2,077	1,956	2,077
Deschailions.....	1,213	1,161	1,142	Georgetown.....	1,313	1,583	2,061
St. Rémi.....	1,080	1,021	1,135	Clinton.....	2,547	2,254	2,018
Greenfield Park.....	—	—	1,112	Elmira.....	1,060	1,782	2,016
Macamic.....	—	—	1,104	Grimsby.....	1,001	1,669	2,004
St. Eustache.....	1,079	996	1,098	Milton.....	1,372	1,654	1,873
Cowansville.....	699	881	1,094	Ridgetown.....	2,405	1,954	1,855
La Providence.....	819	894	1,078	Deseronto.....	3,527	2,013	1,847
Chambly Basin.....	849	990	1,068	Blind River.....	2,656	2,558	1,843
St. George East.....	544	1,410	1,058	Seaforth.....	2,245	1,983	1,829
Rawdon.....	—	—	1,042	Mitchell.....	1,945	1,766	1,80
Montreal South.....	—	790	1,030	Fergus.....	1,396	1,534	1,790
Abord-à-Plouffe.....	—	—	1,011	Kingsville.....	1,537	1,427	1,780

35.—Population of Towns and Villages having between 1,000 and 5,000 inhabitants in 1921, as compared with 1901 and 1911.—concluded.

Towns and Villages.	1901.	1911.	1921.	Towns and Villages.	1901.	1911.	1921.
Ontario—concluded.				Manitoba—concluded.			
Warton.....	2,443	2,266	1,726	Souris.....	839	1,854	1,710
Acton.....	1,484	1,720	1,722	Carman.....	1,439	1,271	1,591
Mount Forest.....	2,019	1,839	1,718	Minnedosa.....	1,052	1,483	1,505
Chesley.....	1,743	1,734	1,708	Virden.....	901	1,550	1,361
Tilbury.....	1,012	1,368	1,673	Morden.....	1,522	1,130	1,268
Thessalon.....	1,205	1,945	1,651	Stonewall.....	589	1,005	1,112
Essex.....	1,391	1,353	1,588	Tuxedo.....	—	—	1,062
Blenheim.....	1,653	1,387	1,565				
Fort Erie.....	890	1,146	1,546	Saskatchewan.			
Southampton.....	1,636	1,685	1,537	North Battleford (city).....	—	2,105	4,108
Humberstone.....	—	—	1,524	Swift Current (city).....	121	1,852	3,518
Palmerston.....	1,850	1,665	1,523	Weyburn (city).....	113	2,210	3,193
Vankleek Hill.....	1,674	1,577	1,499	Melville.....	—	1,816	2,808
Durham.....	1,422	1,581	1,494	Estevan.....	141	1,981	2,290
Port Dalhousie.....	1,125	1,152	1,492	Kamsack.....	—	473	2,002
Gravenhurst.....	2,146	1,624	1,478	Humboldt.....	—	859	1,821
Victoria Harbour.....	989	1,616	1,463	Melfort.....	—	599	1,746
Port Dover.....	1,177	1,138	1,462	Biggar.....	—	315	1,535
Mattawa.....	1,400	1,524	1,462	Indian Head.....	768	1,285	1,439
Morrisburg.....	1,693	1,696	1,444	Canora.....	—	435	2,230
Rainy River.....	—	1,578	1,444	Battleford.....	609	1,335	1,229
Exeter.....	1,792	1,555	1,442	Shanavon.....	—	—	1,146
Forest.....	1,553	1,445	1,422	Gravelbourg.....	—	—	1,106
Brighton.....	1,378	1,320	1,411	Watrous.....	—	781	1,101
Alliston.....	1,256	1,279	1,376	Moosomin.....	868	1,143	1,099
Niagara.....	1,258	1,318	1,357	Rosthern.....	413	1,172	1,074
New Hamburg.....	1,208	1,484	1,351	Assiniboia.....	—	—	1,006
Dresden.....	1,613	1,551	1,339	Kindersley.....	—	456	1,003
Tweed.....	1,165	1,368	1,339	Maple Creek.....	382	936	1,002
Keewatin.....	1,156	1,242	1,327				
L'Orignal.....	1,026	1,347	1,293	Alberta.			
Port Elgin.....	1,313	1,235	1,291	Drumheller.....	—	—	2,499
Capreol.....	—	—	1,287	Red Deer (city).....	323	2,118	2,328
Havelock.....	984	1,436	1,268	Wetaskiwin (city).....	550	2,411	2,061
Harrison.....	1,637	1,491	1,263	Camrose.....	—	1,586	1,892
Point Edward.....	780	874	1,258	Macleod.....	796	1,844	1,723
Beamsville.....	832	1,096	1,256	Taber.....	—	1,400	1,705
Cardinal.....	1,378	1,111	1,241	Cardston.....	639	1,207	1,612
Caledonia.....	801	952	1,223	Ponoka.....	151	642	1,594
Kemptville.....	1,523	1,192	1,204	Coleman.....	—	1,557	1,590
Lakefield.....	1,244	1,397	1,189	Blairmore.....	231	1,137	1,552
Iroquois Falls.....	—	—	1,178	Vegreville.....	—	1,029	1,479
Norwich.....	1,269	1,112	1,176	Stettler.....	—	1,444	1,416
Hagersville.....	1,020	1,106	1,169	Raymond.....	—	1,465	1,394
Riverside.....	—	—	1,155	Hanna.....	—	—	1,364
Parkhill.....	1,430	1,289	1,152	Vermilion.....	—	625	1,272
Port Perry.....	1,465	1,148	1,143	High River.....	153	1,182	1,198
Chippawa.....	460	707	1,137	Edson.....	—	497	1,138
Elora.....	1,187	1,197	1,136	Redcliff.....	—	220	1,137
Sioux Lookout.....	—	550	1,127	Lacombe.....	499	1,029	1,133
Winchester.....	1,101	1,143	1,126	Magrath.....	424	995	1,069
Port Credit.....	—	—	1,123	Grande Prairie.....	—	—	1,061
Waterford.....	1,122	1,083	1,123	Big Valley.....	—	—	1,057
Arthur.....	1,285	1,102	1,104	Beverly.....	—	—	1,039
Bobcaygeon.....	914	1,000	1,095				
Port McNicoll.....	—	—	1,074	British Columbia.			
Shelburne.....	1,188	1,113	1,072	Kamloops.....	—	3,772	4,501
Watford.....	1,279	1,092	1,059	Fernie.....	—	3,146	4,343
Madoc.....	1,157	1,058	1,058	Vernon.....	802	2,671	3,685
Richmond Hill.....	629	652	1,055	Cumberland.....	732	1,237	3,176
Stouffville.....	1,223	1,034	1,053	Trail.....	1,360	1,460	3,020
Chelmsford.....	493	550	1,045	Revelstoke.....	1,600	3,017	2,782
Fenelon Falls.....	1,132	1,053	1,031	Cranbrook.....	1,196	3,090	2,725
Dryden.....	140	715	1,019	Kelowna.....	261	1,663	2,520
Eganville.....	1,107	1,189	1,015	Port Coquitlam.....	—	—	2,148
Markham.....	967	909	1,012	Rossland.....	6,156	2,826	2,097
Tavistock.....	403	981	1,011	Prince George.....	—	—	2,053
				Ladysmith.....	746	3,295	1,967
Manitoba.				Chilliwack.....	277	1,657	1,767
Transcona.....	—	—	4,185	Merritt.....	—	703	1,721
Dauphin.....	1,135	2,815	3,885	Grand Forks.....	1,012	1,577	1,469
Selkirk.....	2,188	2,977	3,726	Duncan.....	—	—	1,178
Neepawa.....	1,418	1,864	1,887	Port Alberni.....	—	—	1,056
Pas.....	—	—	1,858	Port Moody.....	—	—	1,030

10.—Illiteracy.

The results of the census of 1921 with regard to illiteracy, recently compiled and published by the Dominion Bureau of Statistics, furnish most encouraging evidence of the progressive elimination of illiteracy in Canada. Indeed, the rate of progress is not adequately shown by the comparison made in Table 36 between illiteracy in 1921 and in the two preceding censuses, since this comparison can be made only for the ages of 5 years and over, and experience has shown that the illiteracy of children between 5 and 9 years of age is practically irreducible, as well as meaningless, since educationists disagree as to the beneficial effects of sending to school children of 5 and 6 years of age.

36.—Illiteracy among the Population 5 Years of Age and over, by Provinces, 1901, 1911 and 1921.

Provinces.		Population.		Can read and write.	Can read only.	Cannot read nor write.	Per cent 5 years and over.		
		Total.	5 years of age and over.				Can read and write.	Can read only.	Cannot read nor write.
		No.	No.	No.	No.	No.	p.c.	p.c.	p.c.
CANADA—	1901	5,371,315	4,728,631	3,918,915	129,584	680,132	82.88	2.74	14.38
	1911	7,206,643	6,319,160	5,622,844	32,863	663,453	88.98	.52	10.50
	1921	8,788,483	7,730,833	6,957,412	58,254	715,167	90.00	.75	9.25
Prince Edward Island—	1901	103,259	91,860	77,372	4,591	9,897	84.23	5.00	10.77
	1911	93,728	83,792	76,259	1,153	6,380	91.01	1.33	7.61
	1921	88,615	78,969	72,147	1,335	5,487	91.36	1.69	6.95
Nova Scotia—	1901	459,574	407,152	331,007	18,143	58,002	81.30	4.46	14.24
	1911	492,338	433,801	384,605	4,358	44,838	88.66	1.00	10.34
	1921	523,837	463,442	413,952	6,026	43,464	89.32	1.30	9.38
New Brunswick—	1901	331,120	290,732	233,060	10,618	47,054	80.16	3.65	16.19
	1911	351,889	306,896	261,160	2,622	43,114	85.10	.85	14.05
	1921	387,876	338,996	293,454	3,286	42,256	86.57	.97	12.46
Quebec—	1901	1,648,898	1,411,324	1,099,693	61,614	250,017	77.92	4.37	17.71
	1911	2,005,776	1,714,545	1,483,301	12,977	218,267	86.51	.76	12.73
	1921	2,361,199	2,044,181	1,814,953	17,955	211,273	88.79	.88	10.33
Ontario—	1901	2,182,947	1,958,635	1,758,427	28,830	171,378	89.78	1.47	8.75
	1911	2,527,292	2,264,419	2,108,485	7,302	148,632	93.11	.32	6.57
	1921	2,933,662	2,632,085	2,447,588	15,207	169,290	92.99	.58	6.43
Manitoba—	1901	255,211	219,290	184,295	3,083	31,912	84.04	1.41	14.55
	1911	461,394	398,078	340,870	1,231	55,977	85.63	.31	14.06
	1921	610,118	532,306	464,369	4,011	69,926	87.24	.75	12.01
Saskatchewan—	1901	91,279	78,185	49,941	797	27,447	63.88	1.02	35.10
	1911	492,432	421,432	362,768	926	57,738	86.08	.22	13.70
	1921	757,510	644,335	566,038	4,609	73,688	87.85	.71	11.44
Alberta—	1901	73,022	62,554	42,731	707	19,116	68.31	1.13	30.56
	1911	374,295	325,916	283,513	1,198	41,205	86.99	.37	12.64
	1921	588,454	509,896	453,572	3,259	53,065	88.95	.64	10.41
British Colum- bia—	1901	178,657	163,336	121,782	973	40,581	74.56	.60	24.84
	1911	392,480	356,603	314,183	1,013	41,407	88.11	.28	11.61
	1921	524,582	474,787	427,374	2,552	44,861	90.01	.28	9.45
Yukon—	1901	27,219	26,864	17,374	54	9,436	64.67	.20	35.13
	1911	8,512	8,006	6,843	76	1,087	85.47	.95	13.58
	1921	4,157	3,880	2,732	8	1,140	70.41	.21	29.38
Northwest Territories—	1901	20,129	18,699	3,233	174	15,292	17.29	.93	81.78
	1911	6,507	5,672	857	7	4,808	15.11	.12	84.77
	1921	7,988	7,471	749	6	6,716	10.03	.08	89.89

Illiteracy of Population over 10 years of age by Age-Groups and by Sexes.—The proportion of the population 10 years of age and over totally illiterate—that is, unable to read and write in any language—was in 1921 5·10 p.c. as shown in Table 37. This population included Indians, exclusive of whom the percentage was 4·49. If we include Indians the percentage of illiteracy among persons 10 to 14 years was 2·0; among persons 15 to 20 years it was 2·7; among those 21 to 34 years it was 3·9; among those 35 to 64 years it was 6·5; and for those 65 years and over it was 13·1. Further, 55,112 or about one-sixth of all illiterates of specified ages were 65 years and over, while two-thirds were 35 years and over, although the population over 35 years formed only about 40 p.c. of the population of stated ages. The important point, however, is that illiteracy is reduced by about one-third in the case of each successive younger group below 65.

The above rate of progress shown in the case of the younger groups ought to mean that the practical extinction of illiteracy in Canada is in sight. How far the situation is in hand may be seen from the fact that the percentage of illiterates first quoted (5·10) does not by any means represent the general level of the Canadian population. The high percentage of illiteracy—and by “high” is meant anything above the average 5·10—is confined to certain areas containing only 30 p.c. of the Canadian population. Fifty p.c. of the illiterate persons in Canada reside in areas containing only 18 p.c. of the population, while 11 p.c. of the illiterates are residents of areas containing only 1 p.c. of the population.

37.—Illiteracy among the Population 10 Years of Age and over, classified as Canadian-born, British-born or Foreign-born, by Age Groups, 1921.

Nativity and age groups.	Total.			Can read and write.		Can read only.		Cannot read nor write.	
	No.	No.	p.c.	No.	p.c.	No.	p.c.	No.	p.c.
Totals	6,682,072	6,298,704	94·26	42,349	-64	341,019	5·10		
10-14 years.....	913,149	893,923	97·88	887	-10	18,339	2·01		
15-20 years.....	948,379	919,069	96·90	2,780	-29	26,528	2·70		
21 and over.....	4,820,546	4,485,712	93·05	38,682	-80	296,152	6·14		
21-34 years.....	1,904,057	1,819,569	95·56	9,619	-50	74,869	3·93		
35-64 years.....	2,476,105	2,295,295	92·60	19,814	-80	160,996	6·52		
65 and over.....	419,107	354,790	84·65	9,205	2·19	55,112	13·14		
Age not stated.....	21,277	16,058	75·47	44	-02	5,175	24·22		
Canadian-born	4,799,370	4,540,488	94·60	28,674	-60	230,208	4·80		
10-14 years.....	800,725	783,016	97·79	795	-10	16,920	2·11		
15-20 years.....	759,114	735,448	96·88	2,127	-28	21,539	2·84		
21 and over.....	3,239,531	3,022,030	93·29	25,752	-79	191,749	5·92		
21-34 years.....	1,284,216	1,238,560	96·45	5,166	-40	40,490	3·15		
35-64 years.....	1,623,468	1,509,131	92·96	13,072	-80	101,265	6·24		
65 and over.....	311,932	259,423	83·16	7,477	2·40	45,032	14·44		
Age not stated.....	19,915	14,916	74·90	37	-18	4,962	24·92		
British-born¹	1,032,453	1,021,423	98·93	3,222	-31	7,808	·76		
10-14 years.....	53,634	53,475	99·70	20	-04	139	·26		
15-20 years.....	95,438	94,988	99·53	162	-17	288	·30		
21 and over.....	883,381	872,960	98·82	3,040	-34	7,381	·84		
21-34 years.....	314,792	312,900	99·40	674	-21	1,218	·39		
35-64 years.....	494,372	489,355	98·98	1,375	-28	3,642	·74		
65 and over.....	73,750	70,273	95·29	989	1·34	2,488	3·37		
Age not stated.....	467	432	92·50	2	-43	33	7·07		
Foreign-born	850,249	736,793	86·66	10,453	1·23	103,003	12·11		
10-14 years.....	58,790	57,438	97·70	72	-12	1,280	2·18		
15-20 years.....	93,825	88,633	94·47	491	·52	4,701	5·01		
21 and over.....	697,634	590,722	84·67	9,890	1·42	97,022	13·91		
21-34 years.....	305,049	268,109	87·89	3,779	1·24	33,161	10·87		
35-64 years.....	358,265	296,809	82·85	5,367	1·50	56,089	15·65		
65 and over.....	33,425	25,094	75·08	739	2·21	7,592	22·71		
Age not stated.....	895	710	79·33	51	-56	189	20·11		

¹ This term includes those born in the British Empire outside of Canada.

In Table 38, dealing with illiteracy by sexes in the various provinces, it is shown that illiteracy is greater among males, 5.73 p.c. of the male population 10 years and over being illiterate, as compared with 4.43 p.c. among the female population.

38.—Illiteracy among the Population of 10 Years and over, by Sexes and Provinces, 1921.

Provinces.	Popula- tion 10 years and over.	Can read and write.	Can read only.	Cannot read nor write.	Percentages.		
					Can read and write.	Can read only.	Cannot read nor write.
CANADA—	No.	No.	No.	No.	p.c.	p.c.	p.c.
Total.....	6,682,072	6,298,704	42,340	341,019	94.26	.64	5.10
Male.....	3,467,796	3,245,756	23,298	198,742	93.60	.67	5.73
Female.....	3,214,276	3,052,948	19,051	142,277	94.98	.59	4.43
Prince Edward Island—							
Total.....	69,223	66,155	944	2,124	95.57	1.36	3.07
Male.....	35,031	33,418	362	1,251	95.40	1.03	3.57
Female.....	34,192	32,737	582	873	95.75	1.70	2.55
Nova Scotia—							
Total.....	403,576	378,925	4,025	20,626	93.89	1.00	5.11
Male.....	205,528	192,076	1,919	11,533	93.46	.93	5.61
Female.....	198,048	186,849	2,106	9,093	94.35	1.06	4.59
New Brunswick—							
Total.....	292,043	267,614	2,212	22,217	91.63	.76	7.61
Male.....	148,959	134,133	1,058	13,768	90.05	.71	9.24
Female.....	143,084	133,481	1,154	8,449	93.29	.81	5.90
Quebec—							
Total.....	1,737,323	1,616,239	13,418	107,666	93.03	.77	6.20
Male.....	868,377	792,985	7,203	68,189	91.32	.83	7.85
Female.....	868,946	823,254	6,215	39,477	94.74	.72	4.54
Ontario—							
Total.....	2,324,464	2,244,203	11,323	68,938	96.55	.49	2.96
Male.....	1,173,349	1,124,964	6,415	41,970	95.87	.55	3.58
Female.....	1,151,115	1,119,239	4,908	26,968	97.23	.43	2.34
Manitoba—							
Total.....	452,105	417,125	2,925	32,055	92.26	.65	7.09
Male.....	240,602	223,370	1,640	15,592	92.84	.88	6.48
Female.....	211,503	193,755	1,285	16,463	91.61	.61	7.78
Saskatchewan—							
Total.....	537,885	502,770	3,298	31,817	93.47	.61	5.92
Male.....	302,423	285,354	1,930	15,139	94.36	.64	5.00
Female.....	235,462	217,416	1,368	16,678	92.34	.58	7.08
Alberta—							
Total.....	434,066	409,365	2,214	22,487	94.31	.51	5.18
Male.....	245,906	233,222	1,337	11,347	94.84	.54	4.62
Female.....	188,160	176,143	877	11,140	93.61	.47	5.92
British Columbia—							
Total.....	420,551	392,470	1,979	26,102	93.32	.47	6.21
Male.....	241,063	223,181	1,429	16,453	92.58	.59	6.83
Female.....	179,488	169,289	550	9,649	94.32	.31	5.37
Yukon—							
Total.....	3,613	2,637	7	969	72.99	.19	26.82
Male.....	2,562	2,046	5	511	79.86	.19	19.95
Female.....	1,051	591	2	458	56.23	.19	43.58
Northwest Territories—							
Total.....	6,738	717	4	6,017	10.64	.06	89.30
Male.....	3,511	523	—	2,988	14.90	—	85.10
Female.....	3,227	194	4	3,029	6.01	.12	93.87

39.—Illiteracy among the Population 10 Years of Age and over, by Provinces, classified according to Nativity, 1921.

Provinces.	Population.		Can read and write.	Can read only.	Cannot read nor write.	Per cent 10 years and over.		
	Total.	10 years of age and over.				Can read and write.	Can read only.	Cannot read nor write.
	No.	No.	No.	No.	No.	p.c.	p.c.	p.c.
CANADA	8,788,483	6,682,072	6,298,704	42,349	341,019	94.26	.64	5.10
Canadian born.....	6,832,747	4,799,370	4,540,488	28,674	230,208	94.60	.60	4.80
British born.....	1,065,454	1,032,453	1,021,423	3,222	7,808	98.93	.81	.76
Foreign born.....	890,282	850,249	736,793	10,453	103,003	86.66	1.23	12.11
Prince Edward Island	88,615	69,223	66,155	944	2,124	95.57	1.36	3.07
Canadian born.....	86,250	67,218	64,279	917	2,022	95.63	1.36	3.01
British born.....	1,074	1,040	941	24	75	90.48	2.31	7.21
Foreign born.....	1,291	965	935	3	27	96.89	.31	2.80
Nova Scotia	523,837	403,576	378,925	4,025	20,626	93.89	1.00	5.11
Canadian born.....	480,332	362,949	341,084	3,616	18,249	93.97	1.00	5.03
British born.....	29,519	27,981	26,500	281	1,200	94.71	1.00	4.29
Foreign born.....	13,986	12,646	11,341	128	1,177	89.68	1.01	9.31
New Brunswick	387,876	292,043	267,614	2,212	22,217	91.63	.76	7.61
Canadian born.....	366,418	272,368	249,065	2,081	21,222	91.45	.76	7.79
British born.....	10,709	10,247	10,034	56	157	97.92	.55	1.53
Foreign born.....	10,749	9,428	8,515	75	838	90.32	.79	8.89
Quebec	2,361,199	1,737,323	1,616,239	13,418	107,666	92.03	.77	6.20
Canadian born.....	2,172,623	1,556,899	1,445,825	12,182	98,892	92.87	.78	6.35
British born.....	89,864	86,788	85,453	369	966	98.46	.43	1.11
Foreign born.....	98,712	93,636	84,961	867	7,808	90.73	.93	8.34
Ontario	2,933,662	2,324,464	2,244,203	11,323	68,938	96.55	.49	2.96
Canadian born.....	2,291,979	1,707,106	1,656,802	7,237	43,066	97.05	.43	2.52
British born.....	459,577	444,888	439,967	1,566	3,355	98.89	.35	.76
Foreign born.....	182,106	172,470	147,433	2,520	22,517	85.48	1.46	13.06
Manitoba	610,118	452,105	417,125	2,925	32,055	92.26	.65	7.09
Canadian born.....	387,746	286,058	225,691	902	9,465	95.61	.38	4.01
British born.....	113,114	109,899	109,065	239	595	99.24	.22	.54
Foreign born.....	109,258	106,148	82,369	1,784	21,995	77.60	1.68	20.72
Saskatchewan	757,510	537,885	502,770	3,298	31,817	93.47	.61	5.92
Canadian born.....	457,833	248,285	237,968	785	9,529	95.84	.32	3.84
British born.....	100,355	97,726	97,198	187	341	99.46	.19	.35
Foreign born.....	199,322	191,874	167,604	2,323	21,947	87.35	1.21	11.44
Alberta	588,454	434,066	409,365	2,214	22,487	94.31	.51	5.18
Canadian born.....	315,090	172,249	162,772	481	8,996	94.50	.28	5.22
British born.....	99,392	96,315	95,903	180	232	99.57	.19	.24
Foreign born.....	173,972	165,502	150,690	1,553	13,259	91.05	.94	8.01
British Columbia	524,582	420,551	392,470	1,979	26,102	93.22	.47	6.21
Canadian born.....	264,046	167,584	155,317	461	11,806	92.68	.28	7.04
British born.....	160,752	156,475	155,272	319	884	99.23	.20	.57
Foreign born.....	99,784	96,492	81,881	1,199	13,412	84.86	1.24	13.90
Yukon	4,157	3,613	2,637	7	969	72.99	.19	26.82
Canadian born.....	2,600	2,073	1,120	5	948	54.03	.24	45.73
British born.....	572	569	566	1	2	99.47	.18	.35
Foreign born.....	985	971	951	1	19	97.94	.10	1.96
Northwest Territories	7,988	6,738	717	4	6,017	10.64	.06	89.30
Canadian born.....	7,781	6,532	515	4	6,013	7.88	.06	92.06
British born.....	93	92	92	—	—	100.00	—	—
Foreign born.....	114	114	110	—	4	96.49	—	3.51

Illiteracy by Nativity of Population.—The illiteracy by nativity of the population 10 years of age and over is shown by provinces for Canadian-born, British-born and foreign-born in Table 39, these figures showing that the foreign-born are much the most illiterate group of the population, with illiteracy of 12·11 p.c., as compared with 4·80 p.c. for Canadian-born and 0·76 p.c. for British-born. In considering this table it should be remembered that the term "Canadian-born" includes the Indian population.

Perhaps the most interesting and significant feature of the achievement of the schools of Canada is illustrated by the difference between the proportion of illiterates among foreign-born immigrants and among the children of these immigrants. Here it is necessary to differentiate between such foreign-born immigrants as Americans and certain Europeans, who enjoyed excellent educational advantages in their own country, and the immigrants who belong to illiterate countries. Of the latter, a group of 367,838 foreign-born persons over the age of 10, belonging to seventeen of the less literate races, showed an illiteracy of 24·8 p.c. The children of these immigrants who were born in the Empire, i.e., practically all in Canada, to the number of 133,010, showed an illiteracy of only 5·1 p.c., or exactly the same percentage as shown by the general Canadian population. This constitutes striking evidence of the energy with which the Provincial Departments of Education, the schools and other child welfare agencies in Canada have faced one of the country's most serious problems.

The element of the Canadian-born population showing the lowest percentage of illiteracy is that with one parent Canadian, the other British. This element existed in 1921 to the number of 375,068 persons over the age of 10 years, and shows an illiteracy of 1·08 p.c. as compared with 1·25 p.c. in the case of the next lowest, the persons of whom both parents were British-born.

Illiteracy of Adult Population.—There were in the nine provinces in 1921, exclusive of Indians, 4,760,815 persons 21 years of age and over, of whom 261,579 or 5·49 p.c. were unable to "read and write." The highest percentage of illiteracy (8·57 p.c.) for this class of the population was in New Brunswick, followed by Quebec with 7·97 p.c. and Manitoba with 7·70 p.c. illiterate. Table 40 summarizes by provinces the number and percentage of illiterates in the population 21 years of age and over in 1921. In comparing these figures with those for the voting population, allowance should be made for the inclusion here of a considerable number of illiterate alien nationals.

40.—Numbers and Percentages of Illiterates in the Adult Population of the Nine Provinces, 1921 (Indians excluded).

Provinces:	Population, 21 years of age and over.									
	Total.			Illiterate.						
	Both Sexes..	Male.	Female.	Total.		Male.		Female.		
				No.	p.c.	No.	p.c.	No.	p.c.	
Prince Edward Island.	49,493	24,908	24,585	1,836	3·71	1,067	4·28	769	3·31	
Nova Scotia.	284,121	145,231	138,890	17,618	6·20	9,758	6·72	7,860	5·66	
New Brunswick.	201,458	103,244	98,214	17,259	8·57	10,647	10·31	6,612	6·73	
Quebec.	1,170,491	587,226	583,265	93,322	7·97	59,386	10·11	33,936	5·82	
Ontario.	1,734,310	876,341	857,969	56,325	3·25	35,120	4·01	21,205	2·47	
Manitoba.	315,265	171,348	143,917	24,281	7·70	11,887	6·94	12,394	8·61	
Saskatchewan.	376,307	219,215	157,092	22,919	6·09	10,991	5·01	11,928	7·59	
Alberta.	310,539	182,176	128,363	13,723	4·42	7,110	3·90	6,613	5·15	
British Columbia.	318,831	189,471	129,360	14,296	4·48	10,636	5·61	3,660	2·83	
Total.	4,760,815	2,499,160	2,261,655	261,579	5·49	156,602	6·27	104,977	4·64	

Illiteracy among Urban Populations.—In Table 41 statistics are given of the illiteracy of the population 10 years of age and over in cities and towns of 10,000 and over, as in 1921. Here it will be noted that the largest cities of Canada, which receive a large number of immigrants, make by no means the best showing in regard of literacy. The lowest percentage of illiteracy in Canada is found in Westmount and Outremont—0.34 p.c. and 0.57 p.c. respectively. These, however, can hardly be considered as independent communities, but rather as suburbs of Montreal. Apart from these, Stratford, with 0.77 p.c., Galt, with 0.80 p.c., and St. Thomas, with 0.84 p.c. of illiteracy, stand highest among the self-dependent urban communities of the country.

41.—Illiteracy among the Population 10 Years of Age and over in Cities and Towns of 10,000 and over, 1921.

Cities and Towns.	Population.		Can read and write.	Can read only.	Cannot read nor write.	Percent 10 years and over		
	Total.	10 years and over.				Can read and write.	Can read only.	Cannot read nor write.
	No.	No.	No.	No.	No.	p.c.	p.c.	p.c.
Montreal.....	618,506	478,733	458,929	2,585	17,219	95.86	0.54	3.60
Toronto.....	521,893	425,093	416,248	1,695	7,150	97.92	0.40	1.68
Winnipeg.....	179,087	139,712	134,127	646	4,939	96.00	0.46	3.54
Vancouver.....	117,217	97,416	93,565	401	3,450	96.05	0.41	3.54
Hamilton.....	114,151	91,302	88,976	389	1,937	97.45	0.43	2.12
Ottawa.....	107,843	85,923	83,205	401	2,317	96.84	0.47	2.69
Quebec.....	95,193	72,009	69,008	645	2,356	95.83	0.90	3.27
Calgary.....	63,305	48,806	47,996	154	756	98.14	0.31	1.55
London.....	60,959	50,660	50,006	132	522	98.71	0.26	1.03
Edmonton.....	58,821	44,713	43,640	138	935	97.60	0.31	2.09
Halifax.....	58,372	46,445	45,261	230	954	97.45	0.50	2.05
St. John.....	47,166	38,042	37,397	128	517	98.30	0.34	1.36
Victoria.....	38,727	32,216	31,533	126	557	97.88	0.39	1.73
Windsor.....	38,591	30,668	30,091	107	470	98.12	0.35	1.53
Regina.....	34,432	26,752	26,296	71	385	98.30	0.34	1.44
Brantford.....	29,440	23,552	22,834	85	633	96.95	0.36	2.69
Saskatoon.....	25,739	19,668	19,387	67	214	98.57	0.34	1.09
Verdun.....	25,001	18,543	18,217	60	266	98.24	0.32	1.44
Hull.....	24,117	17,099	15,476	142	1,481	90.51	0.83	8.66
Sherbrooke.....	23,515	18,397	17,308	148	941	94.08	0.80	5.12
Sydney.....	22,545	16,724	16,045	108	571	95.94	0.65	3.41
Three Rivers.....	22,367	16,853	15,497	172	1,184	91.95	1.02	7.03
Kitchener.....	21,763	17,161	16,737	74	350	97.53	0.43	2.04
Kingston.....	21,753	17,843	17,544	76	223	98.32	0.43	1.25
Sault Ste. Marie.....	21,092	15,692	14,875	43	774	94.79	0.28	4.93
Peterborough.....	20,994	16,879	16,576	71	232	98.21	0.42	1.37
Fort William.....	20,541	14,704	13,110	49	1,545	89.16	0.33	10.51
St. Catharines.....	19,881	15,981	15,667	89	225	98.03	0.56	1.41
Moose Jaw.....	19,285	14,449	14,202	30	217	98.29	0.21	1.50
Guelph.....	18,128	14,778	14,470	60	248	97.91	0.41	1.68
Westmount.....	17,593	15,420	15,348	20	52	99.53	0.13	0.34
Moncton.....	17,488	13,652	13,305	31	316	97.46	0.23	2.31
Glace Bay.....	17,007	12,361	11,634	100	627	94.12	0.81	5.07
Stratford.....	16,094	12,887	12,749	39	99	98.93	0.30	0.77
St. Thomas.....	16,026	13,094	12,917	67	110	98.65	0.51	0.84
Lachine.....	15,404	11,344	10,828	74	442	95.45	0.65	3.90
Brandon.....	15,397	11,713	10,394	56	1,263	88.74	0.48	10.78
Port Arthur.....	14,886	11,064	10,636	58	370	96.13	0.53	3.34
Sarnia.....	14,877	12,054	11,881	20	153	98.56	0.17	1.27
Niagara Falls.....	14,764	11,902	11,633	59	210	97.74	0.50	1.76
New Westminster.....	14,495	11,732	11,494	62	176	97.97	0.53	1.50
Chatham.....	13,256	10,869	10,642	33	194	97.91	0.30	1.79
Outremont.....	13,249	10,669	10,588	20	61	99.24	0.19	0.57
Galt.....	13,216	10,717	10,608	23	86	98.98	0.22	0.80
St. Boniface.....	12,821	9,590	9,311	28	251	97.09	0.29	2.62
Charlottetown.....	12,347	9,983	9,748	59	176	97.65	0.59	1.76
Belleville.....	12,206	9,820	9,549	41	230	97.24	0.42	2.34
Owen Sound.....	12,190	9,792	9,599	32	161	98.03	0.33	1.64
Oshawa.....	11,940	9,281	9,003	57	221	97.00	0.62	2.38
Lethbridge.....	11,097	8,261	7,937	103	221	96.08	1.25	2.67
St. Hyacinthe.....	10,859	8,772	8,303	37	432	94.65	0.42	4.93
North Bay.....	10,692	7,768	7,435	47	286	95.71	0.60	3.69
Shawinigan Falls.....	10,625	7,511	7,270	27	214	96.79	0.36	2.85
Lévis.....	10,470	7,741	7,293	79	369	94.21	1.02	4.77
Brockville.....	10,043	8,457	8,297	27	133	98.11	0.32	1.57

11.—School Attendance.

The census statistics of school attendance for the population between the ages of 5 and 19 years of age are presented for 1901, 1911 and 1921 in Tables 42 and 43 for Canada as a whole. In comparing the statistics of school attendance for the census of 1921 with those of 1911 and 1901, some things must be taken into account. In 1921, as stated in the "Instructions to Enumerators", the record of school attendance covered the nine months ended May 31, 1921, while in 1911 the period of school attendance had reference to the calendar year 1910; in the 1901 census it had reference to the census year ended March 31, 1901; moreover, the records for 1901 were compiled and published only for the age groups 5 to 9 and 10 to 19 years.

In the 1921 census the population 5 to 19 years of age numbered 2,763,728, or 31.5 p.c. of the total population of stated ages (8,767,206), as compared with 2,163,937 or 30.2 p.c. in a population of 7,169,960 of stated ages in 1911 and 1,748,741 or 32.8 p.c. in a population of 5,322,238 of stated ages in 1901.

In 1901, 52.13 p.c. of the population 5 to 19 years of age (1,748,741) attended school for some period; in 1911 there was a slight improvement, the percentage rising to 52.88 p.c. of the population of this age (2,163,937), while in 1921 the proportion of the population (2,763,728) in this age group attending school rose to 61.32 p.c., being a betterment of nearly 8½ p.c. on the population 5 to 19 over that of the previous census. It is also worthy of note that the percentage of school attendance of males 5 to 19, which showed a falling off from 1901 to 1911, increased from 52.15 p.c. in 1911 to 60.79 p.c. of the total in 1921. The proportion of the female population 5 to 19 reported attending school for any period rose from 51.99 p.c. of the total female population in this age group in 1901 to 53.63 p.c. in 1911 and to 61.86 p.c. in 1921 (Tables 42 and 43).

42.—School Attendance of the Total Population¹ 5 to 19 Years of Age, inclusive, for all Canada in 1901, 1911 and 1921.

Schedule.	Both Sexes.			Males.			Females.		
	1901.	1911.	1921.	1901.	1911.	1921.	1901.	1911.	1921.
5-9 years—Total..	615,899	783,252	1,648,761	311,134	395,045	528,700	304,765	388,207	520,061
At school.....	367,903	459,682	686,616	187,045	232,581	345,496	180,858	227,101	341,120
Not at school....	247,996	323,570	362,145	124,089	162,464	183,204	123,907	161,106	178,941
10-19 years—Total.	1,132,842	1,380,685	1,714,967	575,949	706,155	864,579	556,893	674,530	850,388
At school.....	543,758	684,599	1,008,178	276,601	341,745	501,520	267,157	342,854	506,658
Not at school....	589,084	696,086	706,789	299,348	364,410	363,059	289,736	331,676	343,730
5-19 years—Total.	1,748,741	2,163,937	2,763,728	887,083	1,101,200	1,393,279	861,658	1,062,737	1,370,449
At school.....	911,661	1,144,281	1,694,794	463,646	574,326	847,016	448,015	569,955	847,778
1-3 months....	51,986	42,514	72,544	27,946	21,904	36,596	24,040	20,610	35,948
4-6 "	114,861	131,343	133,419	60,333	68,468	68,078	54,528	62,875	65,341
7-9 "	744,814	970,424	1,488,831	375,367	483,954	742,342	369,447	486,470	746,489
Not at school....	837,080	1,019,656	1,068,934	423,437	526,874	546,263	413,643	492,782	522,671

¹Including population 5-19 years of age of Yukon and Northwest Territories.

43.—Percentage of School Attendance of Total Population¹ 5 to 19 Years of Age, inclusive, for all Canada in 1901, 1911 and 1921.

Schedule.	Both Sexes.				Males.				Females.			
	1901.	1911.	1921.	In-crease 1911- 1921.	1901.	1911.	1921.	In-crease 1911- 1921.	1901.	1911.	1921.	In-crease 1911- 1921.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
5-9 years—Total—												
At school.....	59.73	58.69	65.47	+6.78	60.12	58.87	65.35	+6.48	59.34	58.50	65.59	+7.09
Not at school.....	40.27	41.31	34.53	-6.78	39.88	41.13	34.65	-6.48	40.66	41.50	34.41	-7.09
10-19 years—Total—												
At school.....	48.00	49.53	58.79	+9.21	48.03	48.40	58.01	+9.61	47.97	50.83	59.58	+8.75
Not at school.....	52.00	50.42	41.21	-9.21	51.97	51.60	41.99	-9.61	52.03	49.17	40.42	-8.75
5-19 years—Total—												
At school.....	52.13	52.88	61.32	+8.44	52.27	52.15	60.79	+8.64	51.99	53.63	61.86	+8.23
1-3 months.....	2.97	1.97	2.62	+0.65	3.15	1.99	2.62	+0.63	2.79	1.94	2.62	+0.68
4-6 ".....	6.57	6.07	4.83	-1.24	6.80	6.22	4.89	-1.33	6.33	5.92	4.77	-1.15
7-9 ".....	42.59	44.84	53.87	+9.03	42.32	43.94	53.28	+9.34	42.87	45.77	54.47	+8.70
Not at school.....	47.87	47.12	38.68	-8.44	47.73	47.85	39.21	-8.64	48.01	46.37	38.14	-8.23

¹Including population 5-19 years of age of Yukon and Northwest Territories.

In Table 44 the records of school attendance are presented for 1911 and 1921 for the total population 7 to 14 years (Indians included). The table shows that there were 1,526,948 persons, including Indians, in the nine provinces of the Dominion in 1921 between the ages of 7 and 14, of whom 1,352,711 or 88.59 p.c. attended school in the school year, as compared with 922,429 or 79.78 p.c. out of a total population of 1,156,270 in this age period who were reported as having attended school in 1911.

For Canada (exclusive of Yukon and Northwest Territories), out of every 1,000 children, 7 to 14 years of age, 886 attended school for some period in 1921, as against 798 in 1911. Perhaps the improvement in school attendance in the decade will be more evident if it be noted that the number of children (7-14) not attending school was reduced from 202 per 1,000 in 1911 to 114 in 1921. The betterment in school attendance shown for Canada as a whole is reflected in each of the provinces. In 1911 Prince Edward Island held the premier position with 84.60 p.c. of the population 7-14 at school; in 1921 the first position goes to Ontario with 91.48 p.c. of the population 7-14 at school for some period in the year, followed by British Columbia with 90.02 p.c. The greatest improvement in school attendance is shown by the Prairie Provinces and the smallest by the Maritime Provinces, but this is largely due to the fact that in 1911 Prince Edward Island, Nova Scotia and New Brunswick each showed a school attendance of better than 80 p.c., whereas Alberta reported an attendance of less than 63 p.c., Saskatchewan was under 67 p.c. and Manitoba had a school attendance of slightly more than 74 p.c. of the population of compulsory school age.

44.—School Attendance of the Population 7 to 14 Years of Age by Provinces in 1911 and 1921.

Provinces.	Total.	At school for any period.		Not at school.		At school by months.					
						1-3.		4-6.		7-9.	
	No.	No.	p.c.	No.	p.c.	No.	p.c.	No.	p.c.	No.	p.c.
Canada¹...	1,526,948	1,352,711	88.59	174,237	11.41	37,881	2.48	97,875	6.41	1,216,955	79.70
1911	1,156,270	922,429	79.78	233,841	20.22	24,295	2.10	94,452	8.17	803,682	69.51
P. E. Island...1921	15,169	13,357	88.05	1,812	11.95	812	5.35	1,985	13.09	10,560	69.61
1911	16,616	14,057	84.60	2,559	15.40	563	3.39	2,211	13.31	11,283	67.90
Nova Scotia...1921	92,944	81,139	87.39	11,805	12.61	2,778	2.99	7,550	8.13	70,811	76.27
1911	84,367	69,903	82.86	14,464	17.14	2,679	3.18	9,974	11.82	57,250	67.86
New Brunswick...1921	71,481	59,518	83.26	11,963	16.74	3,329	4.66	8,753	12.24	47,436	66.36
1911	62,588	50,100	80.05	12,488	19.95	1,965	3.14	7,928	12.67	40,207	64.24
Quebec.....1921	455,919	394,587	86.55	61,332	13.45	7,006	1.54	14,934	3.28	372,647	81.73
1911	372,551	301,482	80.92	71,069	19.08	3,975	1.07	12,831	3.44	284,676	76.45
Ontario.....1921	456,757	417,846	91.48	38,911	8.52	7,172	1.57	17,999	3.94	392,675	85.97
1911	377,704	318,042	84.20	59,662	15.80	7,415	1.96	29,810	7.89	280,871	74.35
Manitoba.....1921	112,607	100,692	89.42	11,915	10.58	3,054	2.71	7,745	6.88	89,893	79.83
1911	72,552	53,956	74.37	18,596	25.63	2,013	2.77	7,420	10.23	44,523	61.37
Saskatchewan 1921	142,042	124,929	87.95	17,113	12.05	7,466	5.26	23,182	16.32	94,281	66.37
1911	72,426	48,316	66.71	24,110	33.29	2,538	3.51	14,082	19.44	31,696	43.76
Alberta.....1921	102,605	90,943	88.63	11,662	11.37	5,296	5.16	12,520	12.20	73,127	71.27
1911	54,928	34,527	62.86	20,401	37.14	2,330	4.24	7,616	13.87	24,581	44.75
British Columbia...1921	77,424	69,700	90.02	7,724	9.98	968	1.25	3,207	4.14	65,525	84.63
1911	42,538	32,046	75.33	10,492	24.67	817	1.92	2,580	6.06	28,649	67.35

¹Exclusive of Yukon and Northwest Territories.

In comparing the two years it should be noticed that the figures in the 1911 census refer to the calendar year 1910, while those in the 1921 census refer to the nine months immediately preceding June 1, 1921. It is particularly necessary to remember this when comparing the number and proportions attending from 7 to 9 months. The difference, however, is not so great as it might seem from the fact that one census referred apparently to twelve months, while the other referred to nine. Out of the twelve months would have to be deducted the vacation periods of about two months, although during these vacations summer schools (which were in existence in 1911 to a greater extent than in 1921) were in operation. The advantage which the net ten months period of 1911 had over the nine month period of 1921 in enabling a larger proportion of children to be present more than 7 months was perhaps neutralized by the fact that there would be a large influx of very young children just beginning school after the first of June. These children attending only one month before the end of the school year would tend to lower the proportion attending the full period. This point partly explains the fact that the census figures are lower than the figures of Departments of Education.

The points of chief interest, perhaps, are: (1) the proportion of the population 7 to 14 years of age inclusive (the compulsory school ages for many of the provinces) at school in 1911 and 1921; (2) the proportion at the same age at school from 7 to 9 months; and (3) the regularity of attendance of those actually at school as shown by the proportion of those at school attending 7 to 9 months as follows:—

	1911.	1921.
Percentage of the population 7 to 14 years attending school for any period.....	79.8	88.6
Percentage of population 7-14 attending 7-9 months.....	69.5	79.7
Percentage of those at school (7-14 years) attending 7-9 months....	87.2	90.0

Table 45 shows the number and proportion of the population 7 to 14 years in each province, exclusive of Indians, who attended school for any period, and of those who attended for a full term. As stated elsewhere, 89.10 p.c. of the 1,508,846

children 7 to 14 years of age in the nine provinces (Indians excluded) attended school for some period and 80.25 p.c. were at school from 7 to 9 months in the school year.

45.—Number and Percentage of the Population 7-14 Years of Age who attended School for any Period in 1921, (Indians excluded).

Provinces.	Population 7 to 14 years of age.						
	Total.	Attending school for any period.		Not attending school for any period.		Attending school 7 to 9 months.	
	No.	No.	p.c.	No.	p.c.	No.	p.c.
Prince Edward Island.....	15,121	13,322	88.10	1,799	11.90	10,538	69.69
Nova Scotia.....	92,553	80,914	87.42	11,639	12.58	70,728	76.42
New Brunswick.....	71,252	59,314	83.25	11,938	16.75	47,328	66.42
Quebec.....	453,398	393,142	86.71	60,256	13.29	371,510	81.94
Ontario.....	452,750	415,947	91.87	36,803	8.13	391,285	86.42
Manitoba.....	110,223	99,548	90.31	10,680	9.69	89,068	80.80
Saskatchewan.....	139,640	124,071	88.85	15,569	11.15	93,609	67.04
Alberta.....	100,362	90,178	89.85	10,184	10.15	72,439	72.18
British Columbia.....	73,542	67,935	92.38	5,607	7.62	64,273	87.40
Total.....	1,508,846	1,344,371	89.10	164,475	10.90	1,210,778	80.25

The percentage of the population 5 to 19 years of age attending school by age periods and sex is shown by provinces in Table 46.

46.—Percentage of the Population, Male and Female, by certain Age Periods, attending School, 1921.¹

Provinces.	5-19 years.		5 years.		6-9 years.		10-14 years.		15-19 years.		7-14 years.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Prince Edward Island..	60.00	61.40	13.43	10.95	75.55	75.52	89.38	89.46	25.65	29.88	88.46	87.73
Nova Scotia.....	60.09	62.41	14.08	14.87	75.78	75.90	88.84	89.01	23.92	32.30	87.48	87.37
New Brunswick.....	55.02	58.10	6.21	7.18	69.68	70.77	83.81	85.07	20.85	28.07	82.67	83.83
Quebec.....	59.15	59.68	17.54	19.04	80.92	80.87	84.78	84.61	18.72	19.22	86.80	86.62
Ontario.....	63.50	64.67	18.13	18.92	83.32	83.50	92.18	92.05	24.44	28.36	91.91	91.83
Manitoba.....	62.50	63.71	6.73	6.60	78.21	77.40	91.74	91.67	25.70	30.88	90.40	90.22
Saskatchewan.....	60.69	62.15	9.22	9.21	75.96	74.94	90.34	90.08	21.89	27.56	89.14	88.55
Alberta.....	61.76	63.79	5.55	5.75	73.31	72.89	92.75	92.47	29.15	35.99	90.03	89.67
British Columbia.....	65.15	67.04	4.71	5.38	80.32	79.37	93.38	93.14	31.03	38.41	92.74	92.01
Canada¹.....	61.19	62.25	13.76	14.59	79.49	79.36	89.21	89.10	23.00	26.78	89.19	89.01

¹Exclusive of Yukon, Northwest Territories and Indians.

Taking now the improvement at each age, the following percentages of the population at each age from 5 to 14 attended school 7 to 9 months in 1911 and 1921. (Comparison is vitiated here to a small extent by the inclusion of Indians in 1911, but the effect on the round numbers used is insignificant.)

	5 years.	6 years.	7 years.	8 years.	9 years.
1911.....	8	30	57	71	76
1921.....	7.7	36	70	81	87
	10 years.	11 years.	12 years.	13 years.	14 years.
1911.....	77	79	75	68	54
1921.....	87	85	85	81	66

The attendance at the ages of 10 to 14 would probably give the best description of the attendance of Canadian-born as compared with that of British-born and foreign-born. The following percentages of the population at these ages attended 7 to 9 months:—

	1911.	1921.
Canadian-born.....	74	82
British-born.....	61	83
Foreign-born.....	49	71

At the ages 7 to 14 the following were the percentages:—

	1911.	1921.
Canadian-born.....	72	81
British-born.....	62	83
Foreign-born.....	48	71

Comparing rural and urban districts the following proportion of the population at the ages of 7 to 14 attended 7 to 9 months:—

	1911.	1921.
Rural.....	64.1	72
Urban.....	79.6	89

Comparative statistics of school attendance in cities of 10,000 population and over are presented in Table 47.

47.—School Attendance of Children 7 to 14 Years of Age in Cities of 10,000 Population and over, 1921.

Cities and Towns.	Popu- lation, 1921.	Popu- lation, 7-14 years.	At school for any period.		At school by months.		
			No.	p.c.	1-3.	4-6.	7-9.
Montreal.....	618,506	103,810	93,475	90.04	695	1,930	90,850
Toronto.....	521,893	72,380	67,974	93.91	543	1,906	65,525
Winnipeg.....	179,087	28,772	27,812	96.66	267	586	26,959
Vancouver.....	117,217	15,648	14,800	94.58	102	417	14,281
Hamilton.....	114,151	16,513	15,274	92.50	111	514	14,649
Ottawa.....	107,843	16,055	14,887	92.73	100	244	14,543
Quebec.....	95,193	16,329	14,735	90.24	106	338	14,291
Calgary.....	63,305	9,747	9,491	97.37	60	165	9,266
London.....	60,959	8,136	7,723	94.92	45	119	7,559
Edmonton.....	58,821	9,760	9,091	93.15	55	201	8,835
Halifax.....	58,372	8,665	8,177	94.37	36	132	8,009
St. John.....	47,166	7,023	6,445	91.77	19	91	6,335
Victoria.....	38,727	5,391	5,123	95.03	35	186	4,902
Windsor.....	38,591	5,064	4,769	94.17	40	110	4,619
Regina.....	34,432	5,169	4,947	95.71	65	45	4,837
Brantford.....	29,440	4,437	4,168	93.94	25	124	4,019
Saskatoon.....	25,739	3,990	3,834	96.09	18	62	3,754
Verdun.....	25,001	4,328	3,799	87.78	28	52	3,719
Hull.....	24,117	4,646	4,163	89.60	31	68	4,064
Sherbrooke.....	23,515	4,083	3,627	88.83	80	141	3,406
Sydney.....	22,545	4,158	3,796	91.29	19	49	3,728
Three Rivers.....	22,367	4,095	3,663	89.45	61	148	3,454
Kitchener.....	21,763	3,293	3,123	94.84	17	58	3,048
Kingston.....	21,753	3,079	2,929	95.13	8	67	2,854
Sault Ste. Marie.....	21,092	3,593	3,397	94.54	36	66	3,295
Peterborough.....	20,994	3,290	3,097	94.13	24	48	3,025
Fort William.....	20,541	3,828	3,655	95.48	37	97	3,521
St. Catharines.....	19,881	2,696	2,506	92.95	6	36	2,464
Moose Jaw.....	19,285	3,121	3,012	96.51	25	57	2,930
Guelph.....	18,128	2,674	2,499	93.46	11	35	2,453
Westmount.....	17,593	2,112	1,973	93.42	9	17	1,947
Moncton.....	17,488	2,579	2,387	92.56	7	45	2,335
Glace Bay.....	17,007	3,688	3,379	91.62	29	55	3,285
Stratford.....	16,094	2,395	2,224	92.86	9	13	2,197
St. Thomas.....	16,026	2,305	2,208	95.79	12	91	2,105
Lachine.....	15,404	2,883	2,541	88.14	6	63	2,472
Brandon.....	15,397	2,595	2,497	96.22	36	56	2,405
Port Arthur.....	14,886	2,642	2,533	95.87	12	70	2,451
Sarnia.....	14,877	2,112	2,025	95.88	14	23	1,988
Niagara Falls.....	14,764	2,037	1,840	90.33	4	23	1,813
New Westminster.....	14,495	2,313	2,180	94.25	18	63	2,099
Chatham.....	13,256	1,861	1,769	95.06	16	60	1,693
Outremont.....	13,249	2,015	1,886	93.60	11	24	1,851
Galt.....	13,216	1,899	1,758	92.58	10	41	1,707
St. Boniface.....	12,821	2,277	2,181	95.78	25	56	2,100
Charlottetown.....	12,347	1,770	1,622	91.64	9	39	1,574
Belleville.....	12,206	1,828	1,739	95.13	12	42	1,685
Owen Sound.....	12,190	1,908	1,847	96.80	23	37	1,787
Oshawa.....	11,940	1,811	1,542	85.15	17	42	1,483
Lethbridge.....	11,097	1,890	1,843	97.51	13	53	1,777
St. Hyacinthe.....	10,859	1,722	1,561	90.65	8	23	1,530
North Bay.....	10,692	1,932	1,816	94.00	14	32	1,770
Shawinigan Falls.....	10,625	2,040	1,876	91.96	9	17	1,850
Levis.....	10,470	2,286	2,073	90.68	27	53	1,993
Brookville.....	10,043	1,256	1,186	94.43	13	33	1,140

12.—Quinquennial Population of the Prairie Provinces.

The Census and Statistics Act, 1905, provided for taking a census of population and agriculture in Manitoba, Saskatchewan and Alberta in 1906 and in every tenth year thereafter, thus instituting, in addition to the general decennial census for all Canada, a quinquennial census of population and agriculture for the three prairie provinces. The quinquennial census of Manitoba, Saskatchewan and Alberta was therefore taken as for June 1, 1916, and the complete results were published in a report dated January 12, 1918. A summary of the principal data was published in the Year Book for 1918, pages 105-112.

Total Population of Prairie Provinces.—The male and female population of Manitoba, Saskatchewan and Alberta (a) by provinces, (b) by the electoral districts constituted by the Representation Act, 1914 (4-5 Geo. V, c. 51), and (c) by cities, towns and villages, as compared with the population by sex for 1911 and by totals for 1901 and 1906, was published in the Year Book of 1916-17 (pp. 95-105). The total population of the three prairie provinces in 1916 was returned as 1,698,220, as compared with 1,328,121 in 1911, 808,863 in 1906, and 419,512 in 1901. As the population of the prairie provinces in 1921 was 1,956,082, the increase during the five-year period since 1916 was 257,862 or 15.18 p.c. This comparatively low rate of increase, as compared with the increase of 28 p.c. during the five years ended 1916, was undoubtedly due to the effect of the war in restricting immigration. Table 48 shows the population of the prairie provinces for 1901, 1906, 1911, 1916 and 1921, the population being distinguished by sex for 1911 and 1916. In Table 49 are furnished statistics of the population of Manitoba from 1870, and of Saskatchewan and Alberta from 1901, with the percentage of increase in each quinquennium.

48.—Population of the Prairie Provinces, 1901, 1906, 1911, 1916 and 1921.

Provinces.	1901.	1906.	1911.			1916.			1921.
	Total.	Total.	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.	Total.
Manitoba.....	255,211	365,688	252,954	208,440	461,394	294,609	259,251	553,860	610,118
Saskatchewan.....	91,279	257,763	291,730	200,702	492,432	363,787	284,048	647,835	757,510
Alberta.....	73,022	185,412	223,792	150,503	374,295	277,256	219,269	496,525	588,454
Total.....	419,512	808,863	768,476	559,645	1,328,121	935,652	762,568	1,698,220	1,956,082

49.—Population of the Prairie Provinces by Sex at each Census Period from 1870 for Manitoba and from 1901 for Saskatchewan and Alberta.

Province and Years.	Population.			Increase over Preceding Census.					
	Males.		Females.	Total.		Males.		Females.	Total.
	No.	No.	No.	No.	p.c.	No.	p.c.	No.	p.c.
Manitoba—									
1870.....	6,317	5,911	12,228	—	—	—	—	—	—
1881.....	35,123	27,137	62,260	28,806	456.01	21,226	359.10	50,032	409.16
1886.....	59,594	49,046	108,640	24,471	69.67	21,909	80.73	46,380	74.49
1891.....	84,342	68,164	152,506	24,748	41.53	19,118	38.98	43,866	40.37
1896.....	1	1	193,425	—	—	—	—	40,919	26.83
1901 ¹	138,504	116,707	255,211	54,162	64.22	48,543	71.22	102,705	67.34
1906.....	205,183	160,505	365,688	66,679	43.14	43,798	37.53	110,477	43.29
1911.....	252,954	208,440	461,394	47,771	23.28	47,935	29.87	95,706	26.17
1916.....	294,609	259,251	553,860	41,655	16.51	50,811	24.37	92,466	20.04
1921.....	320,567	289,551	610,118	25,958	8.81	30,300	11.69	56,258	10.16

¹ In 1896 the Census consisted of a count of population only.

² Ten-year increase shown.

49.—Population of Prairie Provinces by Sex at each Census Period from 1870 for Manitoba and from 1901 for Saskatchewan and Alberta.—concluded.

Provinces and Years.	Population.			Increase over Preceding Census.					
	Males.	Females.	Total.	Males.		Females.		Total.	
	No.	No.	No.	No.	p.c.	No.	p.c.	No.	p.c.
Saskatchewan—									
1901.....	49,431	41,848	91,279	—	—	—	—	—	—
1906.....	152,791	104,972	257,763	103,360	209.10	63,124	150.84	166,484	182.39
1911.....	291,730	200,702	492,432	138,939	90.93	95,730	91.20	234,669	91.05
1916.....	363,787	284,048	647,835	72,057	24.70	83,346	41.52	155,403	31.50
1921.....	413,700	343,810	757,510	49,913	13.72	59,762	21.04	109,675	16.93
Alberta—									
1901.....	41,019	32,003	73,022	—	—	—	—	—	—
1906.....	108,283	77,129	185,412	67,264	162.98	45,126	141.00	112,390	153.91
1911.....	223,792	150,503	374,295	115,509	106.67	73,374	95.13	188,883	101.87
1916.....	277,256	219,269	496,525	53,464	23.89	68,766	45.69	122,230	32.66
1921.....	324,208	264,246	588,454	46,952	16.93	44,977	20.51	91,929	18.51
Prairie Provinces—									
1901.....	228,954	190,558	419,512	—	—	—	—	—	—
1906.....	466,257	342,606	808,863	237,303	103.64	152,048	79.79	389,351	92.81
1911.....	768,476	559,645	1,328,121	302,219	64.82	217,039	63.35	519,258	64.20
1916.....	935,652	762,568	1,698,220	167,176	21.75	202,923	36.26	370,099	28.87
1921.....	1,058,475	897,607	1,956,082	122,823	13.13	135,039	17.71	257,862	15.18

13.—Population of the British Empire.

During the decade 1911-1921 the boundaries of the British Empire were contracted by the voluntary giving up of Egypt and expanded by the addition of various territories as a result of the war. The increases of territory were mainly in Africa, where the Tanganyika Territory, Southwest Africa, and portions of the Cameroons and Togoland were added to the Empire, with an aggregate area of 731,000 square miles and an estimated population of slightly over 5,000,000. In Asia the territories acquired by mandate from the League of Nations include Palestine and Mesopotamia, with 3,606,464 inhabitants on an area of 152,250 square miles. In the Pacific, the territories added to the Empire include Western Samoa, the Territory of New Guinea, the Bismarek archipelago and part of the Solomon islands, all of which were formerly German possessions. According to the most reliable estimates, the total area of these regions is 90,812 square miles with a population of 592,157.

Statistics of the area and population of the territories included in the British Empire in 1921 are given in Table 50, together with comparative figures of population for 1911.

50.—Area and Population of the British Empire, by Countries, 1911 and 1921.

(From the British Statistical Abstract, Statesman's Year Book, and other sources.)

Countries.	Area in square miles, 1921.	Population.	
		Census of 1911.	Census of 1921.
Europe.			
England and Wales ¹	58,340	36,070,492	37,885,242
Scotland.....	30,405	4,760,904	4,882,288
Northern Ireland.....	32,586	1,250,531	1,284,000 ²
Irish Free State.....		(3,139,688)	3,165,000 ⁴
Isle of Man.....	227	52,016	60,238
Channel Islands.....	75	96,899	89,614
Gibraltar.....	1½	19,120	20,638
Malta ⁶	117	211,564	213,024
Total, Europe.....	121,751½	45,601,214	47,600,044

**50.—Area and Population of the British Empire, by Countries,
1911 and 1921—continued.**

Countries.	Area in square miles, 1921.	Population.	
		Census of 1911.	Census of 1921.
Asia.			
Aden, including Perim.....	80	46,165	54,923
Socotra.....	1,382	12,000	12,000 ³
Borneo—			
British North Borneo.....	31,106	208,183	257,804
Brunei.....	4,000	21,718	25,454
Sarawak.....	42,000	500,000	600,000
Total, Borneo.....	77,106	729,901	883,258
Bahrein Is. Prot.....	275	—	110,000 ⁴
Ceylon ⁵	25,331	4,106,350	4,504,549
Maldives Is.....	—	—	70,000 ⁴
Cyprus, ^{6, 7}	3,584	274,108	310,709
Hong Kong ⁸	391	366,145	625,166
New Territories.....		90,594	
India, British.....	1,093,074	244,221,377	247,003,293
Native States.....	709,555	70,888,854	71,939,187
Total, India.....	1,802,629	315,110,231	318,942,480
Straits Settlements.....	1,572	715,529	883,769
Labuan.....	28	6,546	
Christmas Is.....	62	1,463	
Cocos or Keeling Is.....	—	749	
Total, Straits Settlements and dependencies.....	1,662	724,287	885,669
Asiatic Mandates—			
Palestine.....	9,000	—	757,182
Mesopotamia (Iraq).....	143,250	—	2,849,282 ¹⁶
Total, Asiatic Mandates.....	152,250	—	3,606,464
Federated Malay States—			
Perak.....	7,875	494,057	599,055
Selangor.....	3,138	294,035	401,009
Negri Sembilan.....	2,573	130,199	178,762
Pahang.....	14,037	118,708	146,064
Total, Federated Malay States.....	27,623	1,036,999	1,324,890
Unfederated Malay States—			
Johore.....	7,500	180,412	282,234
Kedah.....	3,800	245,986	338,554
Perlis.....	316	32,746	40,091
Kelantan.....	5,870	286,751	309,293
Trengganu.....	6,000	154,073	153,092
Total, Unfederated Malay States.....	23,486	899,968	1,123,264
Wei-Hai-Wei.....	285	147,133	154,416
Total, Asia.....	2,116,084	323,543,881	332,607,788
Africa.			
British East Africa—			
Kenya Colony and Prot.....	245,060	2,402,863 ⁸	2,376,000
Tanganyika Terr. (late German East Africa).....	365,000	—	4,124,438
Uganda Prot.....	110,300 ⁹	2,843,325	3,066,327 ¹⁰
Zanzibar Prot.....	640	114,000	197,000 ⁴
Pemba.....	380	83,000	
Mauritius.....	720	368,791	385,074
Dependencies of.....	89	6,690	
Nyasaland Prot.....	39,573	970,430	1,201,983
St. Helena.....	47	3,477	3,747
Ascension.....	34	400	250
Tristan da Cunha.....	—	—	130

**50.—Area and Population of the British Empire, by Countries,
1911 and 1921—continued.**

Countries.	Area in square miles, 1921.	Population.	
		Census of 1911.	Census of 1921.
Africa—concluded.			
Seychelles.....	156	22,691	24,523
Somaliland Prot.....	68,000	344,323	300,000 ⁴
South Africa—			
Basutoland.....	11,716	404,507	498,781
Bechuanaland Prot.....	275,000	125,350	152,983
Rhodesia, Southern.....	149,000	771,077	806,620
Rhodesia, Northern.....	291,000	822,482	931,500
Swaziland.....	6,678	99,959	133,563
Union of South Africa—			
Cape of Good Hope.....	276,966	2,564,965	2,782,719
Natal.....	35,284	1,194,043	1,429,398
Orange Free State.....	50,389	528,174	628,827
Transvaal.....	110,450	1,686,212	2,087,636
South West Africa.....	322,400	—	227,732
Total, Union of South Africa.....	795,489	5,973,394	7,156,312
West Africa—			
Nigeria, Colony and Protectorate of.....	336,700	{ 9,269,000 ²⁰ 7,857,983	} 18,750,000
British Cameroon.....	31,000	—	550,000 ⁴
Gambia ¹⁹	4,132	146,101	209,000 ⁴
Gold Coast, Ashanti and Prot.....	79,506	1,503,386	2,078,043
Northern Terr. Prot.....	31,100	360,000	527,914
Togoland.....	12,600	—	188,265
Sierra Leone ¹⁹	30,000	1,403,132 ¹¹	1,536,066
Total, West Africa.....	525,038	20,539,602	23,839,288
Anglo-Egyptian Sudan.....	1,014,000	3,400,000 ¹²	5,850,000
Total, Africa.....	3,897,920	39,296,361	51,048,519
America.			
Bermuda ⁶	19	18,994	20,127
Dominion of Canada.....	3,729,665	7,206,643	8,788,483
Falkland Is.....	7,500	3,275	3,424
British Guiana ¹³	89,480	296,041	307,391
British Honduras.....	8,592	40,458	45,317
Newfoundland.....	42,734	238,670	259,259
Labrador.....	120,000	3,949	3,774
West India Islands—			
Bahamas.....	4,404	55,944	53,031
Barbados.....	166	171,983	156,312
Jamaica.....	4,207	831,383	858,188
Cayman Is.....	89	5,486	5,253
Turk's and Caicos Is.....	166	5,615	5,612
Leeward Islands—			
Virgin Is.....	56	5,557	
St. Christopher.....	68	26,283	
Nevis.....	50	12,945	
Anguilla.....	34	4,075	122,242
Antigua, including Barbuda.....	170	32,265	
Montserrat.....	33	12,200	
Dominica.....	305	33,863	
Trinidad.....	1,862	312,803	
Tobago.....	114	20,749	365,913
Windward Islands—			
St. Lucia.....	233	48,637	52,250
St. Vincent.....	150	41,877	44,925
Grenada and the Grenadines.....	133	73,636	73,406
Total, West India Islands.....	12,239	1,695,321	1,737,132
Total, America.....	4,010,229	9,503,351	11,164,907

**50.—Area and Population of the British Empire, by Countries,
1911 and 1921—concluded.**

Countries.	Area in square miles, 1921.	Population.	
		Census of 1911.	Census of 1921.
Australasia.			
Australia, Commonwealth of—			
New South Wales.....	309,432	1,646,734	2,100,371
Federal Capital Terr.....	940	1,714	2,572
Victoria.....	87,884	1,315,551	1,531,280
South Australia.....	380,070	408,558	495,160
Northern Terr.....	523,620	3,310	3,867
Western Australia.....	975,920	282,114	332,732
Tasmania.....	26,215	191,211	213,780
Queensland.....	670,500	605,813	755,972
Total, Commonwealth ¹⁴	2,974,581	4,455,005	5,435,734
Territory of Papua.....	90,540	380,000 ¹⁵	276,888
Dom. of New Zealand ¹⁷	103,861	1,008,468	1,218,913
Terr. of Western Samoa.....	1,260	—	37,157
Nauru.....	10	—	2,166
Fiji.....	7,083	139,541	157,266
Pacific Islands—			
Tongan Is. Prot. (Friendly Is.).....	385	23,737	23,562 ⁴
Terr. of New Guinea (late German New Guinea)—			
New Guinea (Kaiser Wilhelm's Land).....	70,000	—	350,000
Bismarck Archipelago.....	15,752	—	188,000 ⁴
Solomon Is. Prot.....	3,800	—	17,000 ⁶
Brit. Solomon Islands Prot.....	11,000	150,000	150,583 ⁴
Gilbert and Ellice Is. Colony.....	208	31,121	36,122
Phoenix Group.....	16	59	59
Pitcairn.....	2	140 ¹⁸	140
Starbuck Is.....	1	—	—
Jarvis Is.....	1½	30	30
Malden.....	35	168	168
Total, Pacific Islands.....	101,200½	205,255	765,664
Total, Australasia.....	3,278,535½	6,188,269	7,893,788
Grand Total, British Empire.....	13,424,519½	424,133,076	450,315,046
SUMMARY BY CONTINENTS—			
Europe.....	121,751½	45,601,214	47,600,044
Asia.....	2,116,084	323,543,881	332,607,788
Africa.....	3,897,920	39,296,361	51,048,519
America.....	4,010,229	9,503,351	11,164,907
Australasia.....	3,278,535½	6,188,269	7,893,788

¹Territory heretofore known as the United Kingdom: area, 121,633 square miles; population, 1921, 47,341,070. ²Estimated population Northern Ireland, 1922. ³Census 1911. No census in 1921. ⁴Estimated population, June 30, 1923. ⁵Estimated population, 1919. ⁶Excluding the military and persons on ships in harbours. ⁷Administered by England under a convention dated 4th June, 1878; annexed on the 5th November, 1914. ⁸Administered provinces only. ⁹Including 16,169 square miles of water within the territorial limits of the Uganda Protectorate. ¹⁰Estimated population, December, 1921. ¹¹Including 567,561 children—sex not stated. ¹²Estimated population, 1917. ¹³Exclusive of certain aborigines estimated to number 9,700. ¹⁴The population stated for Australia is exclusive of full-blooded aborigines, estimated at 100,000 in 1911. ¹⁵Number of Papuans estimated. ¹⁶Population in 1920. ¹⁷The area (280 square miles) and population (13,209 in 1921) of the Cook and other islands of the Pacific are excluded. The Maori population (52,751 in 1921) is also excluded. ¹⁸Population in 1914. ¹⁹Preliminary return. ²⁰Northern Protectorate and Southern Nigeria and Colony in 1911.

51.—Population and Area of the Countries of the World, circa 1923—concluded.

Country.	Population.	Area in square miles.	Country.	Population.	Area in square miles.
Africa—concluded.			North and Central America and West Indies—concluded.		
Abyssinia.....	10,000,000	350,000	Newfoundland and Labrador.....	263,033	162,734
Belgian Congo.....	8,508,175	909,654	Martinique.....	244,439	385
Union of South Africa.....	7,156,312	473,089	Guadeloupe and Depen.....	229,822	532
Morocco.....	5,937,071	231,500	Windward Islands.....	170,581	516
Anglo-Egyptian Sudan.....	5,850,000	1,014,000	Barbados.....	156,312	160
Algeria.....	5,802,464	222,180	Leeward Islands.....	122,242	716
Tanganyika Territory.....	4,124,438	365,000	Alaska.....	55,036	590,884
Angola.....	4,119,000	484,800	Curacao.....	54,963	403
Madagascar and adjacent islands.....	3,613,341	228,000	Bahamas.....	53,031	4,404
Mozambique.....	3,120,000	428,132	British Honduras.....	45,317	8,592
Uganda Prot.....	3,066,327	110,300	Virgin Islands of U.S.A.....	26,051	132
French Equat. Africa.....	2,845,936	982,049	Bermudas.....	20,127	19
Kenya Prot.....	2,376,000	245,060	Greenland (Danish).....	14,355	46,740
Tunis.....	2,095,090	50,000	Turks and Caicos Is.....	5,612	166
Gold Coast and Prot.....	2,078,043	79,506	Cayman Islands.....	5,253	89
Liberia.....	2,000,000	40,000	St. Pierre and Miquelon.....	3,918	93
Rhodesia.....	1,738,120	440,000			
Sierra Leone and Prot.....	1,536,066	30,000	Total.....	143,853,652	8,550,927
French Cameroon.....	1,500,000	166,489			
Nyasaland Prot.....	1,201,983	39,573	South America—		
Tripolitania and Cyrenaica.....	1,000,000	406,000	Brazil (incl. Acre).....	30,635,605	3,275,510
French Sahara.....	800,000	861,638	Argentine Republic.....	8,698,516	1,153,119
Italian Somaliland.....	650,000	139,430	Colombia (excl. Panama).....	5,855,077	440,846
Spanish Morocco.....	600,000	7,700	Peru.....	5,550,000	722,461
British Cameroon.....	550,000	31,000	Chile.....	3,754,723	289,828
Basutoland.....	498,781	11,716	Bolivia.....	2,889,970	514,155
French Togoland.....	484,572	21,893	Venezuela.....	2,411,952	398,594
Eritrea.....	392,151	45,783	Ecuador.....	2,000,000	220,502
Mauritius and Depend.....	385,074	809	Uruguay.....	1,494,953	72,153
Somaliland Prot.....	300,000	68,000	Paraguay.....	1,000,000	61,647
Portuguese Guinea.....	289,000	13,940	Panama Republic.....	442,522	32,386
Southwest Africa.....	227,732	322,400	British Guiana.....	307,391	89,480
Gambia and Prot.....	209,000	4,132	Dutch Guiana.....	128,822	54,291
French Somali Coast.....	208,000	5,790	French Guiana.....	44,202	32,000
Zanzibar and Pemba.....	197,000	1,020	Panama Canal Zone.....	23,757	441
Togoland (British).....	188,265	12,600	Falkland Islands.....	3,424	7,500
Reunion.....	173,190	970	South Georgia.....	1,337	1,000
Bechuanaland Prot.....	152,983	275,000	Total.....	65,242,251	7,365,913
Spanish Guinea.....	150,000	10,810			
Cape Verde Islands.....	149,793	1,480	Australasia and Polynesia—		
Swaziland.....	133,563	6,678	Commonwealth of Australia.....	5,435,734	2,974,581
Comoro and Mayotte.....	109,860	780	New Zealand.....	1,218,913	103,861
St. Thomé and Principe Is.....	58,907	360	Territory of New Guinea.....	555,000	89,552
Seychelles.....	24,523	156	Papua.....	276,888	90,540
Ini.....	20,000	965	Hawaii.....	255,912	6,449
Fernando Po, etc.....	15,896	795	Fiji.....	157,266	7,083
St. Helena.....	3,747	47	Solomon Islands Prot. (British).....	150,583	11,000
Rio de Oro and Adrar.....	495	109,200	New Hebrides.....	60,000	5,700
Arcension.....	250	34	New Caledonia and Dependencies.....	57,208	7,650
Total.....	130,900,065	11,736,724	Marshall Islands, etc. (Japanese mandate).....	45,150	—
North and Central America and West Indies—			Western Samoa.....	37,157	1,260
United States.....	105,710,620	2,973,774	Gilbert and Ellice Is.....	36,122	208
Mexico.....	13,887,080	707,198	French Establishments in Oceania.....	31,655	1,520
Canada.....	9,226,740	3,729,665	Tongan Is. Prot.....	23,562	385
Cuba.....	3,123,040	44,164	Guam.....	14,246	210
Haiti.....	2,045,000	10,204	Samoa (American).....	8,194	58
Guatemala.....	2,004,900	48,290	Nauru Island.....	2,166	10
Salvador.....	1,526,000	13,176	Total.....	8,365,756	3,300,067
Porto Rico.....	1,299,809	3,435			
Dominican Republic.....	897,405	19,332			
Jamaica.....	858,188	4,207			
Honduras.....	662,422	44,275			
Nicaragua.....	638,119	51,660			
Costa Rica.....	576,581	23,000			
Trinidad and Tobago.....	365,913	1,976			

II.—VITAL STATISTICS.

The collection of vital statistics commenced in Canada, as in England, with the registration of baptisms, marriages and burials by the ecclesiastical authorities. These registers, maintained by the priests from the first settlement of the country, have made it possible for the vital statistics of the French colony to be compiled from the year 1610.¹ In the beginning, only one copy of such records was made, but in 1678 the Sovereign Council of Quebec ordered that in future such records should be made in duplicate, and that one copy, duly authenticated, should be delivered to the civil authorities. This arrangement was continued after the cession of the country to England, and was extended to the newly-established Protestant churches by an Act of 1793, but the registration among these latter remained seriously defective, both in Lower Canada and in the newly-established province of Upper Canada.

In English-speaking Canada, vital statistics were from the commencement seriously defective, the pioneer settlers often going out into the wilds far from the authority of government and the ministrations of religion. While a law existed in Upper Canada requiring ministers of religion to deposit duplicates of their registers of baptisms, marriages and deaths with the clerks of the peace for transmission to the provincial secretary, this law remained practically a dead letter. Again, the efforts made to secure records of births and deaths at the censuses of 1851 and 1861 produced most unsatisfactory and even ridiculous results, as was pointed out by Dr. J. C. Taché, secretary of the board of registration and statistics, in a memorial published in the report of the Canadian Minister of Agriculture for the year 1865. Nevertheless, in spite of the inherent unsoundness of securing at a point of time in a decennial census a record of births and deaths occurring over a considerable period of time, this method was persisted in down to 1911, when the obviously untrustworthy character of the results obtained led to the discarding of the data obtained at the inquiry. In Montreal and Toronto, for example, the local records showed 11,038 and 5,593 deaths respectively in the calendar year 1910, while the census records showed only 7,359 and 3,148 deaths respectively in the year from June 1, 1910, to May 31, 1911. Similar discrepancies were shown for other areas, proving the census data to be very incomplete.

The Dominion Government instituted in the early 80's a plan for compiling the annual mortuary statistics of cities of 25,000 population and over, by subsidizing local boards of health to supply the information under special regulations. A beginning was made with the five cities of Montreal, Toronto, Hamilton, Halifax and St. John. By 1891 the list had grown to 25, at a time when in most of the provinces the only birth and death statistics were those of the municipalities. Upon the organization of provincial bureaus of vital statistics, however, this work was abandoned, though a conference of Dominion and Provincial officials, held in 1893, passed a resolution calling upon the Provincial and Dominion authorities to co-operate in the work of collecting, compiling and publishing the vital statistics of the Dominion. This resolution had, however, no immediate practical results in securing accurate or comparable vital statistics.

Each of the provinces of the Dominion has since Confederation enacted its own legislation on vital statistics and administered such legislation according to its own individual methods. While the vital statistics of Ontario were published

¹ For a summary of the vital statistics of the Roman Catholic population from 1610 to 1883, see the Statistical Year Book of Quebec, 1921, English or French edition, p. 51. For details by years of this movement of population, see Vol. V of the Census of 1871, pp. 160-265, and Vol. IV of the Census of 1881, pp. 134-145.

in considerable detail annually from 1871, the arrangements for the collection of data were unsatisfactory. Only in 1906 was the publication of vital statistics begun in Prince Edward Island (no report for 1912 has ever been issued), and in Nova Scotia the publication of vital statistics dates only from 1909. Because of the *lacunæ*, and even more because of the incomparability of facts collected, of methods of collection and of standard of enforcement, Canadian vital statistics remained extremely unsatisfactory and impossible to be compiled on a national basis, as was pointed out by the 1912 commission on official statistics, which recommended that "for the Dominion, now engaged in building up its national unity, it is important that uniform data should render possible to statisticians the institution of true interprovincial and international comparisons. By effective co-operation of the provinces with the Dominion this object should be capable of attainment without sacrificing the liberty of each province to satisfy its own special statistical requirements."

The scheme of co-operation, thus outlined, has now been brought into effect as a consequence of the establishment of the Dominion Bureau of Statistics under the Statistics Act of 1918, which specifically provided that the Bureau should publish an annual report on vital statistics, and of the Dominion-Provincial conferences on vital statistics. The scheme was in the first instance drawn up in the Bureau and submitted to the various provinces; later a Dominion-Provincial conference on vital statistics was held in June, 1918, when a comprehensive and final discussion took place.

At the conferences of 1918, it was agreed: (1) that the model Vital Statistics Act prepared by the Dominion Bureau of Statistics, when accepted by the legislatures, should form the basis of the vital statistics legislation of the several provinces, thus securing uniformity and comparability; (2) that the provinces should undertake to obtain the returns of births, marriages and deaths on the prescribed forms as approved and adopted at the conference, the Dominion Bureau of Statistics to supply the forms free of charge; (3) that the provinces should forward to the Dominion Bureau of Statistics, at such times as might be agreed upon, either the original return of births, marriages and deaths, or certified transcriptions of the same; the Dominion Bureau of Statistics to undertake the mechanical compilation and tabulation of the same.

Under the scheme outlined above, the vital statistics of all the provinces, except Quebec, have been secured and compiled on a uniform basis for the year 1920, and with the commencement of 1921, it became possible to issue complete monthly statements for the eight provinces. The first two annual reports have been issued, covering the years 1921 and 1922, and may be obtained on application to the Dominion Statistician.

Statistics showing births, marriages, deaths and natural increase in the nine provinces of Canada in recent years are given under the various headings in the following tables. The statistics for the eight provinces constituting the registration area of Canada are compiled for the provinces in the Dominion Bureau of Statistics, while the figures for Quebec are taken from the provincial returns. The totals for the nine provinces are approximately equivalent to what they would be for the Dominion as a whole, since the Yukon Territory and the Northwest Territories, which are not as yet covered by the new scheme of vital statistics, contain between them less than 1-700th of the population of the Dominion.

Two important considerations should be borne in mind by the students who use either these tables or provincial reports for comparative purposes.

First, in spite of the improvements recently effected, registration generally, and the registration of births in particular, is not universally carried out. The great extent of the country and the isolation of many of its inhabitants partly account for this unsatisfactory situation.

Secondly, the great differences in the age and sex distribution of the population in different provinces, as shown by the census of 1921, make comparisons (of crude birth rates, for instance) as among the provinces unfair and misleading. Thus, for instance, in British Columbia in 1921, there were only 773 females of ages 15 to 44 to every 1,000 males of these ages, while in Quebec there were 1,017 and in Prince Edward Island 986. Evidently in view of the great disproportion between the sexes in British Columbia, the crude birth rate per 1,000 of population in that province cannot properly be compared with the crude birth rate in Quebec or Prince Edward Island. Again, in consequence of different age distributions of population in the different provinces—the Prairie Provinces, for instance, have a very young population because of the healthy young immigrants whom they attract—a comparison of crude death-rates of the provinces is misleading. In the Prairie Provinces, taken as a unit, only 126 per thousand of the 1911 population and 149 per thousand of the 1921 population had passed 45 years of age, while in Quebec 178, in Ontario 233 and in Prince Edward Island 264 per thousand of the population were in 1921 over 45 years of age. These latter provinces, having a much larger proportion of persons of advanced ages, will inevitably have a higher crude death rate per thousand of population than the Prairie Provinces.

The natural increase of the population of Canada is first dealt with, followed by detailed tables of births, marriages and deaths in the order named.

1.—Natural Increase.

Summary statistics of the births, marriages, deaths and natural increase per 1,000 of population are given for the years 1922 and 1923 by provinces in Table 1. The figures for 1923 are provisional and are not available for the province of Quebec, which is not included in the registration area.

The province of Quebec has perhaps the highest rate of natural increase per 1,000 of population of any civilized country, 23·4 in 1921 and 21·7 in 1922. This brings the average for Canada (exclusive of the territories) up to 17·9 in 1921 and 16·8 in 1922, while the remaining eight provinces, constituting the registration area, show as their rate of natural increase 15·8 for 1921, 14·5 in 1922 and 13·0 for 1923. In Australia the average rate of natural increase for the quinquennium 1917 to 1921 was 14·26 and in New Zealand 13·29, in England and Wales 7·20 and in Scotland 8·54 per thousand of population, so that the registration area of Canada compares quite favourably with other British countries.

The rates of natural increase per annum per 1,000 of mean population for other countries during recent years are as follows, the period on which observation is based being given in each case in parentheses: Denmark (1911-15), 12·87; Japan (1914-17), 12·26; Netherlands (1916-20), 12·25; Norway (1911-15), 11·82; Finland (1913-17), 9·14; Italy (1913-17), 8·11; Switzerland (1912-16), 7·89; Sweden (1916-20), 6·60; Spain (1915-19), 4·60; Ireland (1916-20), 3·89; France (1910-14), 0·43.

The present natural increase of the population of Canada is in the neighbourhood of 150,000 per annum, about one-third of which is due to Quebec.

The births, marriages, deaths and natural increase per thousand of population in Canadian cities having a population of 10,000 and over are given for the calendar year 1922 in Table 2.

1.—Summary of Births, Marriages, Deaths and Natural Increase, by Provinces, for the calendar years 1922 and 1923, with Totals for 1920 and 1921.

Provinces.	Births.	Birth rate per 1,000 population.	Marriages.	Marriage rate per 1,000 population.	Deaths.	Death rate per 1,000 population.	Excess of births over deaths.	Rate of natural increase per 1,000 population.
1922.								
Prince Edward Island.....	2,160	24.5	579	6.6	1,113	12.6	1,047	11.9
Nova Scotia.....	12,693	24.0	3,169	6.0	6,679	12.6	6,014	11.4
New Brunswick.....	11,564	29.5	2,799	7.1	5,158	13.2	6,406	16.3
Ontario.....	71,430	24.0	23,360	7.8	34,034	11.4	37,396	12.5
Manitoba.....	17,679	28.2	4,808	7.7	5,754	9.2	11,925	19.0
Saskatchewan.....	22,339	28.4	5,061	6.4	6,119	7.8	16,220	20.6
Alberta.....	16,163	26.5	4,272	7.0	5,264	8.6	10,899	17.8
British Columbia.....	10,166	18.9	3,763	7.0	4,907	9.1	5,259	9.7
Total for Registration Area.....	164,194	25.1	47,811	7.3	69,028	10.5	95,166	14.5
Quebec.....	88,377	35.0	16,609	6.5	33,459	13.2	54,918	21.7
Canada (exclusive of the Territories).....	252,571	28.2	64,420	7.2	102,487	11.5	150,084	16.8
1923.								
Prince Edward Island.....	1,957	22.2	454	5.2	1,142	13.0	815	9.3
Nova Scotia.....	11,607	21.9	3,240	6.1	6,858	12.9	4,749	9.0
New Brunswick.....	10,672	27.0	2,905	7.3	5,006	12.7	5,666	14.3
Ontario.....	70,056	23.2	24,829	8.2	35,637	11.8	34,419	11.4
Manitoba.....	16,472	25.8	4,544	7.1	5,330	8.4	11,142	17.5
Saskatchewan.....	20,530	25.8	5,044	6.3	6,151	7.7	14,379	18.0
Alberta.....	14,972	24.1	4,110	6.6	4,984	8.0	9,988	16.1
British Columbia.....	9,852	18.1	3,930	7.2	4,955	9.1	4,897	9.0
Total for Registration Area.....	156,118	23.5	49,056	7.4	70,063	10.6	86,055	13.0
Canada (exclusive of the Territories) 1921.....	257,728	29.4	69,732	8.0	101,155	11.5	156,573	17.8
Canada (exclusive of the Territories) 1920.....	253,069	29.4	80,931	9.4	118,408	13.7	134,664	15.6

NOTE.—All figures for 1923 are subject to revision. Birth, marriage and death rates for 1920, 1922 and 1923 are calculated on the estimated populations and for 1921 on the population as shown by the census of 1921. The 1923 population is estimated on a new basis.

2.—Summary of Births, Marriages, Deaths and Natural Increase, by Cities of 10,000 and over, for the calendar year 1922.

Cities.	Census population, 1921.	Births.	Marriages.	Deaths.	Excess of births over deaths.	Natural increase per 1,000 of population. ¹
P. E. Island—						
Charlottetown.....	10,814	333	169	242	91	8.42
Nova Scotia—						
Halifax.....	58,372	1,743	749	857	886	15.18
Sydney.....	22,545	495	187	269	226	10.02
Glace Bay.....	17,007	248	120	224	24	1.41
New Brunswick—						
St. John.....	47,166	1,259	454	719	540	11.45
Moncton.....	17,488	642	200	263	379	21.67

¹ Calculated on census populations of 1921.

2.—Summary of Births, Marriages, Deaths and Natural Increase, by Cities of 10,000 and over, for the calendar year 1922.—concluded.

Cities.	Census population, 1921.	Births.	Marriages.	Deaths.	Excess of births over deaths.	Natural increase per 1,000 of population. ²
Quebec—						
Montreal.....	618,506	20,720	5,589	10,406	10,314	16·67
Quebec.....	95,193	4,255	813	1,819	2,436	25·59
Verdun.....	25,001	839	94 ¹	324	515	20·59
Hull.....	24,117	1,084	188 ¹	352	732	30·35
Sherbrooke.....	23,515	855	156 ¹	395	460	19·56
Three Rivers.....	22,367	1,009	182	390	619	23·20
Westmount.....	17,593	129	20 ¹	147	—18	—1·02
Lachine.....	15,404	568	49 ¹	158	410	26·62
Outremont.....	13,249	151	38 ¹	93	58	4·38
St. Hyacinthe.....	10,859	236	76 ¹	142	94	8·65
Shawinigan Falls.....	10,625	534 ¹	49 ¹	154 ¹	380	35·76
Levis.....	10,470	324 ¹	49 ¹	192 ¹	132	12·60
Ontario—						
Toronto.....	521,893	12,745	6,164	5,586	7,159	13·72
Hamilton.....	114,151	3,146	1,289	1,357	1,789	15·67
Ottawa.....	107,843	3,273	1,057	1,657	1,616	14·98
London.....	60,959	1,448	713	925	523	8·58
Windsor.....	38,591	1,323	619	498	825	21·38
Brantford.....	29,440	760	281	382	378	12·84
Kitchener.....	21,763	584	238	225	359	16·49
Kingston.....	21,753	586	242	432	154	7·08
Port William.....	20,541	713	196	224	489	23·80
Peterborough.....	20,994	548	204	313	235	11·19
Sault Ste. Marie.....	21,092	628	182	192	436	20·67
St. Catharines.....	19,881	640	202	256	384	19·31
Guelph.....	18,128	406	198	236	170	9·37
Stratford.....	16,094	404	160	182	222	13·79
St. Thomas.....	16,026	360	168	185	175	10·92
Port Arthur.....	14,886	464	158	172	292	19·62
Sarnia.....	14,877	405	169	188	217	14·59
Niagara Falls.....	14,764	416	279	165	251	17·00
Chatham.....	13,256	401	194	218	183	13·80
Galt.....	13,216	309	122	136	173	13·09
Belleville.....	12,206	338	141	206	132	10·81
Owen Sound.....	12,190	347	113	173	174	12·27
Oshawa.....	11,940	355	141	175	180	15·08
North Bay.....	10,692	437	104	112	325	30·39
Brockville.....	10,043	273	104	205	68	6·77
Manitoba—						
Winnipeg.....	179,087	5,840	2,540	1,865	3,975	22·19
Brandon.....	15,397	506	198	224	282	18·31
St. Boniface.....	12,821	559	144	351	208	16·22
Saskatchewan—						
Regina.....	34,432	1,123	640	413	710	20·62
Saskatoon.....	25,739	957	576	389	568	22·07
Moose Jaw.....	19,285	670	317	268	402	20·84
Alberta—						
Calgary.....	63,305	1,884	850	667	1,217	19·22
Edmonton.....	58,821	2,143	1,005	851	1,292	22·16
Lethbridge.....	11,097	401	211	159	242	21·81
British Columbia—						
Vancouver.....	117,217	2,960	1,529	1,476	1,484	12·66
Victoria.....	38,727	896	412	484	412	10·64
New Westminster.....	14,495	378	192	215	163	11·25

¹ Roman Catholics only.

² Calculated on census populations of 1921.

2.—Births.

Almost throughout the civilized world, the birth rate has in the past generation been on the decline, though the consequent decline in the rate of natural increase has to a considerable extent been offset by a decline in the death rate.

The crude birth rate of England and Wales, for example, was 35·4 per 1,000 population on the average of the decennium 1871-80, 32·5 in 1881-90, and 29·9 in 1891-1900. In 1913 the birth rate was 24·1 and, though it rose to 25·5 in 1920, it fell again to 22·4 in 1921 and to 19·7 in 1923.

Similarly in France, the crude birth rate declined from an average of 25.4 per 1,000 population in the 1870's, 23.9 in the 1880's and 22.2 in the 1890's to 20.4 in 1920 and 19.4 in 1923. In Germany again, the crude birth rate was 39.1 in the 1870's, 36.8 in the 1880's, 36.1 in the 1890's, 23.6 in 1922 and 20.9 in 1923.

In Canada the birth rate still stands at the comparatively high figure of 28.2 per 1,000 in 1922—the last year for which complete figures are available. This is, however, largely due to the influence of Quebec, where the birth rate stood at the very high figure of 35.0 per 1,000 in 1922, as compared with 25.1 per 1,000 in the registration area, where the figures varied from 18.9 per 1,000 in British Columbia to 29.5 in New Brunswick and 28.4 in Saskatchewan.

Preliminary figures for 1923 show 156,118 living births, of which 152,531 were single births; 1,766 were twin births (3,532 infants); there were 17 cases of triplets (51 infants) and one set of quadruplets. Statistics for 1922 and 1923 are given in Table 3.

3.—Summary Analysis of Birth Statistics for the calendar years 1922 and 1923, with Totals for 1920 and 1921.

Provinces.	Living births.			Single births.	Number pairs of twins.	Number cases of triplets.	Il-legiti-mates.	Birth rate per 1,000 population. ⁴
	Male.	Female.	Total.					
1922.								
Prince Edward Island...	1,104	1,056	2,160	2,096	32	—	57	24.5
Nova Scotia.....	6,630	6,063	12,693	12,422	134	1	460	24.0
New Brunswick.....	5,955	5,609	11,564	11,290	137	—	222	29.5
Ontario.....	36,495	34,935	71,430	69,932	740	6	1,519	24.0
Manitoba.....	8,926	8,753	17,679	17,224	226	1	410	28.2
Saskatchewan.....	11,435	10,904	22,339	21,692	322	1	258	28.4
Alberta.....	8,219	7,944	16,163	15,761	198	2	314	26.5
British Columbia.....	5,293	4,873	10,166	9,945	109	1	131	18.9
Total Registration Area.	84,057	80,137	164,194	160,362	1,898	12	3,371	25.1
Quebec.....	44,998	43,379	88,377					35.0
Canada (exclusive of the Territories).....	129,055	123,516	252,571	160,362 ²	1,898 ²	12 ²	3,371 ²	28.2
1923.								
Prince Edward Island...	964	993	1,957	1,925	16	—	43	22.2
Nova Scotia.....	5,938	5,669	11,607	11,327	140	—	443	21.9
New Brunswick.....	5,440	5,232	10,672	10,443	111	1	258	27.0
Ontario.....	36,141	33,915	70,056	68,535	744	11	1,579	23.2
Manitoba.....	8,396	8,076	16,472	16,073	195	3	381	25.8
Saskatchewan.....	10,567	9,963	20,530	20,004	260	2	274	25.8
Alberta.....	7,631	7,341	14,972	14,606	183	—	306	24.1
British Columbia.....	5,107	4,745	9,852	9,618	117	—	124	18.1
Total Registration Area.	80,184	75,934	156,118 ³	152,531	1,766	17	3,408	23.5 ⁴
Canada (exclusive of the Territories), 1921.	123,839	123,889	257,728	165,036 ²	1,937 ²	23 ²	3,347 ²	29.4
Canada (exclusive of the Territories), 1920.	130,665	122,402	253,067	162,798 ²	1,921 ²	33 ²	3,061 ²	29.4

¹ These statistics are not available for the Province of Quebec.

² Partial totals for eight provinces, figures for Quebec not being available.

³ Includes one set of quadruplets.

⁴ Calculated for 1923 on revised estimate of population.

Undoubtedly the test of birth rate most generally accepted by vital statisticians is supplied by the comparison of the total number of legitimate births with the total number of married women between the ages of 15 and 45, though a small number of births occur where the mothers are either below 15 or past the 45th birthday. This test is applied to the registration area of Canada in Table 4.

4.—Births per 1,000 Married Women of Child-bearing Age, by Provinces, 1921 and 1922.

Provinces.	Married women between the ages of 15 and 45 years.	Legitimate births.		Legitimate births per 1,000 married women of child-bearing age.	
		1921.	1922.	1921.	1922.
	No.	No.	No.	No.	No.
Prince Edward Island.....	8,610	2,107	2,103	245	244
Nova Scotia.....	57,916	12,625	12,233	218	211
New Brunswick.....	44,333	11,260	11,342	254	256
Ontario.....	379,307	72,560	69,911	191	184
Manitoba.....	82,325	18,058	17,269	219	210
Saskatchewan.....	104,348	22,235	22,081	213	212
Alberta.....	83,353	16,262	15,849	195	190
British Columbia.....	73,039	10,525	10,035	144	137
Canada (registration area).....	833,231	165,632	160,823	199	193
Quebec.....	265,488	88,749 ¹	88,377 ¹	334 ¹	333 ¹
Canada (exclusive of Territories).....	1,098,719	254,381¹	249,200¹	232¹	227¹

¹No statistics of illegitimate births in Quebec are available. The total number of births in Quebec has accordingly been used, though as a result, the fertility of Quebec and of Canadian married women is somewhat overestimated.

Table 5 shows the number of living male and female births reported for each province in the years 1922 and 1923, together with the proportion of male to female births. Prince Edward Island is the only province in which the number of female births exceeded male births. The preliminary figures for 1923 indicate that among every 1,000 born, 514 were males and 486 females, as compared with a proportion of 512 to 488 in 1922 and of 516 to 484 in 1921.

5.—Births by Sex and Ratio of Males to Females, 1922 and 1923.

Provinces.	Number of Births.					Males to 1,000 females.
	Total.	Males.		Females.		
		Number.	Per cent of total.	Number.	Per cent of total.	
1922.						
Prince Edward Island.....	2,160	1,104	51.1	1,056	48.9	1,045
Nova Scotia.....	12,693	6,630	52.2	6,063	47.8	1,094
New Brunswick.....	11,564	5,955	51.5	5,609	48.5	1,062
Ontario.....	71,430	36,495	51.1	34,935	48.9	1,045
Manitoba.....	17,679	8,926	50.5	8,753	49.5	1,020
Saskatchewan.....	22,339	11,435	51.2	10,904	48.8	1,049
Alberta.....	16,163	8,219	50.9	7,944	49.1	1,035
British Columbia.....	10,166	5,293	52.0	4,873	47.9	1,086
Total Registration Area.....	164,194	84,057	51.2	80,137	48.8	1,049
Quebec.....	88,377	44,998	50.3	43,379	49.7	1,037
Canada (exclusive of the Territories).....	252,571	129,055	51.1	123,516	48.9	1,045
1923.						
Prince Edward Island.....	1,957	964	49.3	993	50.7	971
Nova Scotia.....	11,607	5,938	51.2	5,669	48.8	1,047
New Brunswick.....	10,672	5,440	51.0	5,232	49.0	1,040
Ontario.....	70,056	36,141	51.5	33,915	48.5	1,066
Manitoba.....	16,472	8,396	51.0	8,076	49.0	1,040
Saskatchewan.....	20,530	10,567	51.5	9,963	48.5	1,061
Alberta.....	14,972	7,631	51.0	7,341	49.0	1,040
British Columbia.....	9,852	5,107	51.8	4,745	48.2	1,076
Total Registration Area...	156,118	80,184	51.4	75,934	48.6	1,056

Illegitimacy.—The ratio of illegitimate to total births is, generally speaking, low in Canada as compared with other countries.

Out of 168,979 living births in the registration area of Canada, 3,347, or 2 p.c., were returned in 1921 as the issue of unmarried mothers. Statistics for 1922 show that out of 164,194 births reported in the registration area, 3,371, or 2.1 p.c., were illegitimate. Statistics are given in Table 6.

6.—Illegitimate Births in Registration Area, by Age of Mother and by Provinces, 1921 and 1922.

Age of mother.	P.E.I.	N.S.	N.B.	Ont.	Man.	Sask.	Alta.	B.C.	Total.
1921.									
Under 15 years.....	1	—	3	11	4	5	—	2	26
15-19.....	14	151	72	551	144	106	1	50	1,089
20-24.....	19	168	84	528	154	66	1	45	1,065
25-29.....	7	43	26	208	56	31	1	13	385
30-34.....	3	16	7	112	30	30	—	14	212
35-39.....	—	9	7	63	19	11	—	2	111
40-44.....	—	5	3	15	9	5	—	2	39
45-49.....	—	—	—	4	2	—	—	—	6
Not given.....	5	4	3	100	2	4	296	—	414
Male.....	16	201	113	796	222	122	154	68	1,692
Female.....	33	195	92	796	198	136	145	60	1,655
Total.....	49	396	205	1,592	420	258	299	128	3,347
Percent of total births....	2.3	3.0	1.8	2.1	2.3	1.1	1.8	1.2	2.0
1922.									
Under 15 years.....	—	2	3	20	5	1	6	2	39
15-19.....	15	185	89	546	140	110	106	54	1,245
20-24.....	18	172	79	483	145	79	107	30	1,113
25-29.....	10	59	26	194	56	28	36	15	424
30-34.....	6	24	8	103	37	21	22	9	230
35-39.....	—	12	8	59	20	14	17	3	133
40-44.....	—	5	5	14	6	3	4	—	37
45-49.....	—	1	—	1	1	—	—	—	3
Not given.....	8	—	4	99	—	2	16	18	147
Male.....	29	235	115	826	210	138	170	58	1,781
Female.....	28	225	107	693	200	120	144	73	1,590
Total.....	57	460	222	1,519	410	258	314	131	3,371
Percent of total births....	2.6	3.6	1.9	2.1	2.3	1.2	1.9	1.3	2.1

Stillbirths.—Statistics of the number of children born dead in 1923 are shown below for the registration area of Canada, according to the status and age of the mother. In Quebec in 1922 there were in all 2,849 stillbirths.

7.—Stillbirths in Registration Area, by Age and Status of Mother and by Provinces, 1923.

Age of Mother.	Stillbirths, Registration Area.									
	Unmar- ried mothers.	Married Mothers.								Total.
		P.E.I.	N.S.	N.B.	Ont.	Man.	Sask.	Alta.	B.C.	
Under 15 years of age.....	2	—	—	—	—	—	—	—	—	2
15 years.....	5	—	—	—	—	—	—	—	—	5
16 ".....	10	—	1	1	8	1	—	—	2	23
17 ".....	15	—	1	4	15	1	1	8	—	45
18 ".....	20	1	2	8	52	4	10	7	2	106
19 ".....	12	—	13	8	71	12	11	10	1	138
20 ".....	20	1	11	13	67	18	17	11	5	163
21 ".....	10	1	16	8	86	16	16	14	4	171
22 ".....	17	—	22	7	96	19	21	13	12	207
23 ".....	7	3	17	11	153	20	29	18	12	270
24 ".....	9	2	16	11	118	15	20	18	14	223
25 ".....	10	3	21	9	142	26	19	11	16	257
26 ".....	4	3	17	10	134	25	20	12	14	239
27 ".....	4	2	29	8	136	26	16	21	14	256
28 ".....	8	1	19	16	180	26	22	28	17	317
29 ".....	2	2	17	13	125	23	22	19	12	235
30 " and over.....	16	26	200	104	1,431	285	307	209	149	2,727
Unknown.....	7	9	—	40	149	2	34	—	24	265
Total—1923.....	178	54	402	271	2,963	519	565	399	298	5,649
Total—1922.....	195	66	416	259	3,015	566	587	428	272	5,804
Total—1921.....	240	58	496	314	3,340	586	628	399	326	6,387

NOTE.—Figures for 1923 are subject to revision.

Birth Rates in Various Countries.—The relative position occupied by Canada and its individual provinces among the countries of the world with respect to crude birth rate (the annual number of births per 1,000 of population) is shown in Table 8.

8.—Crude Birth Rates of Various Countries in Recent Years.

Country.	Year.	Crude Birth Rate.	Country.	Year.	Crude Birth Rate.
Egypt.....	1922	43.2	Alberta.....	1923	24.1
Bulgaria.....	1920	39.7	Australia.....	1923	23.8
Ceylon.....	1922	39.4	Northern Ireland.....	1923	23.5
Chile.....	1922	38.4	Finland.....	1922	23.4
Serbia.....	1912	38.0	Canada (registration area).....	1923	23.5
Jamaica.....	1922	37.3	Ontario.....	1923	23.2
Rumania.....	1922	37.1	Norway.....	1923	23.1
Russia (European).....	1921	35.5	Scotland.....	1923	22.8
Quebec.....	1922	35.0	Austria.....	1922	22.7
Japan.....	1922	34.2	Western Australia.....	1923	22.6
Portugal.....	1920	32.1	South Australia.....	1923	22.6
Argentina.....	1921	31.1	United States.....	1922	22.5
Spain.....	1923	30.5	Denmark.....	1922	22.3
Italy.....	1921	30.4	Victoria.....	1923	22.3
Newfoundland.....	1920	29.6	Prince Edward Island.....	1923	22.2
Hungary.....	1923	28.4	New Zealand.....	1923	22.0
Czechoslovakia.....	1922	28.2	Latvia.....	1923	21.9
New Brunswick.....	1923	27.0	Nova Scotia.....	1923	21.9
Union of South Africa (Whites).....	1923	26.6	Germany.....	1923	20.9
Tasmania.....	1923	26.3	Belgium.....	1923	20.3
Uruguay.....	1921	26.2	Estonia.....	1922	20.1
Netherlands.....	1923	26.0	England and Wales.....	1923	19.7
Manitoba.....	1923	25.8	Switzerland.....	1922	19.6
Saskatchewan.....	1923	25.8	Irish Free State.....	1923	19.4
Prussia.....	1921	24.9	France.....	1923	19.4
Queensland.....	1923	24.9	Sweden.....	1923	18.8
New South Wales.....	1923	24.7	British Columbia.....	1923	18.1

3.—Marriages.

Nearly a century ago it was observed in the United Kingdom that the number of marriages tended to be high when the price of wheat was low and to be low when the price of wheat was high. This was quite naturally the case among a population, the majority of which was living at a comparatively low standard of comfort, and where the staple food, as a consequence, was the chief factor in the cost of living.

More recently, the curve showing marriage rates has in the United Kingdom and in other English-speaking countries ceased to bear any constant relation to the price of wheat, the staple food of the people, though it still does so in poorer countries. Its place in influencing the marriage rate has, however, been taken by the general level of prosperity. Marriages in such countries as the United Kingdom, the United States, Canada and Australia tend to increase in "good times" and to diminish in "hard times," when great numbers of those who are contemplating marriage are led to postpone such marriage until the advent of better industrial conditions.

Even in the short period covered by the vital statistics of the registration area of Canada, the truth of the above statement is supported by the evidence. In 1920, a year of great prosperity, the marriages occurring in the registration area of Canada numbered 59,344 or 9.5 per thousand of population; in 1921 they declined to 51,073 or 8.0 per thousand, and in 1922 to 47,811 or 7.3 per thousand of population, largely owing to the industrial depression in these years, while in 1923 they showed an increase to 49,056, the rate, however, remaining much the same as in 1922, at 7.4 per thousand of population. It should also be mentioned, of course, that there doubtless occurred in 1920 a number of deferred marriages, which under more normal conditions would have occurred in the war years. Summary statistics of marriages contracted in 1922 and 1923 appear in Table 9.

9.—Marriages and Marriage Rates, by Provinces, 1922 and 1923.

Provinces.	Population in thousands, 1922.	Marriages, 1922.		Population in thousands, 1923. ¹	Marriages, 1923.	
		No.	Per 1,000 pop.		No.	Per 1,000 pop.
Prince Edward Island.....	88	579	6.6	88	454	5.2
Nova Scotia.....	528	3,169	6.0	530	3,240	6.1
New Brunswick.....	392	2,799	7.1	396	2,905	7.3
Ontario.....	2,981	23,360	7.8	3,019	24,829	8.2
Manitoba.....	626	4,808	7.7	637	4,544	7.1
Saskatchewan.....	786	5,061	6.4	797	5,044	6.3
Alberta.....	611	4,272	7.0	621	4,110	6.6
British Columbia.....	539	3,763	7.0	544	3,930	7.2
Canada (registration area).....	6,551	47,811	7.3	6,632	49,056	7.4
Quebec.....	2,402	16,609	6.5	—	—	—
Canada (exclusive of the Terri- tories).....	8,953	64,420	7.2	—	—	—

NOTE.—The figures for 1923 are preliminary.

¹ Revised estimate of population.

Conjugal Condition of Brides and Grooms.—Statistics showing the previously existing conjugal condition of the contracting parties in the 47,811 marriages which took place in the registration area in 1922 are presented in Table 10.

10.—Previous Conjugal Condition of Brides and Grooms, 1922.

Provinces.	Marriages between								
	Bachelors and			Widowers and			Divorced Men and		
	Spin- sters.	Wi- dows.	Di- vored Women.	Spin- sters.	Wi- dows.	Di- vored Women.	Spin- sters.	Wi- dows.	Di- vored Women.
	No.	No.	No.	No.	No.	No.	No.	No.	No.
Prince Edward Island.....	513	8	—	44	14	—	—	—	—
Nova Scotia.....	2,667	124	9	211	125	7	23	3	—
New Brunswick.....	2,272	121	27	214	134	10	14	5	2
Ontario.....	20,139	830	48	1,311	936	14	58	16	8
Manitoba.....	4,026	211	23	298	179	9	46	7	9
Saskatchewan.....	4,316	229	19	285	172	7	23	7	3
Alberta.....	3,529	236	40	240	150	12	44	11	10
British Columbia.....	2,928	255	83	214	163	17	53	20	30
Canada (registration area).....	40,390	2,014	249	2,817	1,873	76	261	69	62

Nativity of Brides and Grooms.—It may be noted in Table 11 that more than 50 p.c. of brides and grooms in the western provinces were not Canadian born, while in the eastern provinces in most instances more than 70 p.c. were native born. In Prince Edward Island 92 p.c. of the contracting parties were Canadian born. In Nova Scotia and New Brunswick almost 80 p.c. were native born. Altogether 40.0 p.c. of the grooms and 36.4 p.c. of the brides were born outside of Canada.

11.—Nativity, by Percentages, of Persons Married in the Registration Area, by Provinces, 1922.

Provinces.	Popu- lation in thous- ands.	Marriages.		Per cent distribution of Grooms and Brides by Nativity.					
		Total.	Per 1,000 popu- lation.	Born in province of residence.		Born in other provinces.		Born elsewhere.	
				Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.
Prince Edward Island.....	88	579	6.6	91.9	93.3	4.7	2.6	3.5	4.1
Nova Scotia.....	528	3,169	6.0	79.0	84.5	5.4	3.3	15.6	12.2
New Brunswick....	392	2,799	7.1	68.8	75.8	13.8	8.8	17.4	15.4
Ontario.....	2,981	23,360	7.8	62.2	65.1	6.9	6.2	30.9	28.7
Manitoba.....	626	4,808	7.7	26.8	38.8	16.8	12.9	56.4	48.4
Saskatchewan.....	786	5,061	6.4	8.2	17.4	30.1	27.6	61.6	55.0
Alberta.....	611	4,272	7.0	7.8	16.5	26.5	23.6	65.7	59.9
British Columbia..	539	3,763	7.0	16.6	21.1	23.1	20.7	60.3	58.2
Canada (registra- tion area).....	6,551	47,811	7.3	46.3	51.8	13.7	11.8	40.0	36.4

Marriage Rates in Various Countries.—For comparative purposes, the crude marriage rate per 1,000 of population in various countries of the world is shown for the indicated years in Table 12.

12.—Crude Marriage Rates of Various Countries in Recent Years.

Country.	Year.	Crude Marriage Rate.	Country.	Year.	Crude Marriage Rate.
France.....	1920	15.9	Spain.....	1921	7.7
Germany.....	1920	14.5	New Zealand.....	1922	7.6
Prussia.....	1920	14.5	Queensland.....	1922	7.5
Belgium.....	1920	14.0	Canada (registration area).....	1923	7.4
Hungary.....	1920	11.2	New Brunswick.....	1923	7.3
Serbia.....	1911	10.3	Western Australia.....	1922	7.2
United Kingdom.....	1919	9.9	British Columbia.....	1923	7.2
Bulgaria.....	1911	9.4	Manitoba.....	1923	7.1
Japan.....	1921	9.1	Scotland.....	1922	7.0
Netherlands.....	1921	9.1	Norway.....	1921	6.9
Italy.....	1919	8.8	Austria.....	1920	6.7
Denmark.....	1920	8.8	Sweden.....	1921	6.6
Union of South Africa.....	1921	8.5	Alberta.....	1923	6.6
Rumania.....	1914	8.5	Quebec.....	1922	6.5
Switzerland.....	1921	8.4	Chile.....	1921	6.5
Victoria.....	1922	8.3	Saskatchewan.....	1923	6.3
Ontario.....	1923	8.2	Nova Scotia.....	1923	6.1
South Australia.....	1922	8.2	Ireland.....	1919	6.1
New South Wales.....	1922	8.2	Finland.....	1919	5.7
Australia.....	1922	8.0	Ceylon.....	1921	5.5
England and Wales.....	1922	7.9	Prince Edward Island.....	1923	5.2
Russia (European).....	1909	7.9	Jamaica.....	1921	3.5
Tasmania.....	1922	7.8			

4.—Deaths.

Within the past century and more especially within the past generation there has occurred generally throughout the countries of the white world a notable decline in the death rate, except where man has brought death upon himself through wars and the aftermath of wars. How far this decline has been due to advances in medical science, how far to better sanitation and how far to the improvement in the general conditions of living as a result of the increase in the productive power of humanity, is in dispute, but concerning the facts there is no doubt.

Perhaps the most impressive testimony regarding this decline in the death rate is furnished by the mortality statistics of Sweden, where vital statistics have been kept with great accuracy for the whole nation ever since 1750. There the crude death rate declined from an average of 35.67 per 1,000 in the decade 1751-60 to 14.29 in the decade 1911-20 and to 11.4 in 1923.

Similarly, in England, the crude death rate, which was 22.6 per 1,000 in the 60's, 21.3 in the 70's and 18.2 in the 90's of the last century, declined to 15.5 in 1906, 13.8 in 1913 and 11.6 (England and Wales) in 1923. In Scotland, again, the rate was 22.1 in the 60's, 21.8 in the 70's, 18.5 in the 90's, 16.4 in 1906 and 12.9 in 1923.

Of course, the preceding statements are not to be taken to mean that every year will show a decline in the death rate as compared with the preceding year. There will always be years of specially high mortality, as for instance 1918, when the death rate in Ontario, the most populous of the provinces included in the registration area of Canada, was 15.3 per 1,000 as against 12.0 in 1917 and 11.9 in 1919. Over a decade, however, these idiosyncrasies of individual years are reduced to

negligibility, and it remains true that from decade to decade there is, generally speaking and under normal conditions, a decline in the crude death rate of the countries of the white world.

As for Canada, there is little doubt but that the decline in the death rate which has been observed in other countries has also occurred among ourselves, though on account of the improved registration in recent years the diminution of the death rate is not apparent from the statistics collected. In Quebec, however, where the same methods of registration have been employed for many years, the mortality has shown a decline in recent years from 17.89 per 1,000 in 1910 to 13.2 per 1,000 in 1922, largely on account of the reduction in infantile mortality.

The total deaths and death rates are given in Table 13 for the registration area of Canada, by provinces. A slight increase over the 1922 total of deaths is shown by preliminary figures for 1923.

13.—Deaths and Death Rates by Provinces, 1921-1923.

Provinces.	Population (in thousands).			Total Deaths.			Crude death rate per 1,000 population.		
	1921 census.	1922 estim.	1923 ² estim.	1921.	1922.	1923. ³	1921.	1922.	1923. ³
Prince Edward Island.....	89	88	88	1,209	1,113	1,142	13.6	12.6	13.0
Nova Scotia.....	524	528	530	6,420	6,679	6,858	12.3	12.6	12.9
New Brunswick.....	380	392	396	5,410	5,158	5,006	14.2	13.2	12.7
Ontario.....	2,934	2,981	3,019	34,551	34,034	35,637	11.8	11.4	11.8
Manitoba.....	610	626	637	5,388	5,754	5,330	8.8	9.2	8.4
Saskatchewan.....	757	786	797	5,596	6,119	6,151	7.4	7.8	7.7
Alberta.....	588	611	621	4,940	5,264	4,984	8.4	8.6	8.0
British Columbia.....	525	539	544	4,208	4,907	4,955	8.0	9.1	9.1
Canada (registration area)	6,409	6,551	6,632	67,722	69,028	70,063	10.6	10.5	10.6
Quebec.....	2,361	2,520 ¹	—	33,433	33,459	—	14.2	13.2 ¹	—
Canada (exclusive of Territories).....	8,767	—	—	101,155	102,487	—	11.5	11.5	—

¹ Provincial figures.

² Revised estimate of population.

³ Preliminary figures.

Mortality by Sex.—According to Table 14, the number of male children born in 1922 in the registration area exceeded the total male deaths for the year by 47,013, while the gain in the female population during the same period was 48,153. Thus, while the number of male children born exceeded the females by 3,920, the higher mortality among males caused a net increase of the female over the male population of 1,140.

14.—Excess of Births over Deaths, by Provinces, for each Sex and by Totals, 1922.

Provinces.	Males.			Females.			Both sexes.
	Births.	Deaths.	Excess of births over deaths.	Births.	Deaths.	Excess of births over deaths.	Excess of births over deaths.
Prince Edward Island..	1,104	588	516	1,056	525	531	1,047
Nova Scotia.....	6,630	3,515	3,115	6,063	3,164	2,899	6,014
New Brunswick.....	5,955	2,689	3,266	5,609	2,469	3,140	6,406
Ontario.....	36,495	17,726	18,769	34,935	16,308	18,627	37,396
Manitoba.....	8,926	3,079	5,847	8,753	2,675	6,078	11,925
Saskatchewan.....	11,435	3,411	8,024	10,904	2,708	8,196	16,220
Alberta.....	8,219	2,984	5,235	7,944	2,280	5,664	10,899
British Columbia.....	5,293	3,052	2,241	4,873	1,855	3,018	5,259
Total.....	84,057	37,041	47,013	80,137	31,984	48,153	95,166

Mortality by Cause.—In Table 15 are shown the deaths in the registration area in 1921 to 1923 by twenty leading causes. In all years diseases of the heart headed the list with a significant increase to 7,471 in 1923. Pneumonia came second with 8.9 p.c. in 1923, cancer in third place with 7.4 p.c. in 1923, and tuberculosis in fourth place with 6.8 p.c. While a comparison covering only three consecutive years must be considered as of a very tentative nature, the increase in heart disease to 10.7 p.c. of the total must be regarded as very significant, especially since similar increases are occurring in other countries. On the other hand, the decline in tuberculosis must be considered as altogether satisfactory.

15.—Deaths in the Registration Area of Canada from Twenty Leading Causes, 1921-1923.

Causes of Death.	P.E.I.	N.S.	N.B.	Ont.	Man.	Sask.	Alta.	B.C.	Total.
1921.									
Diseases of heart.....	96	563	420	3,394	429	339	308	472	6,021
Pneumonia.....	97	505	500	3,005	563	498	446	352	5,966
Cancer.....	77	480	279	2,585	427	309	281	388	4,826
Tuberculosis, lungs.....	112	579	344	1,731	305	256	260	316	3,903
Tuberculosis, other organs	16	123	69	352	115	66	53	92	886
Premature birth.....	20	195	141	1,630	330	460	310	164	3,250
Diarrhoea and enteritis....	42	241	295	1,619	377	326	243	75	3,218
Senility.....	126	614	389	1,404	82	136	98	65	2,914
Cerebral haemorrhage, apoplexy.....	47	211	175	1,553	177	143	97	197	2,600
Diseases of arteries.....	15	161	88	1,824	127	99	84	157	2,555
Congenital debility.....	27	291	149	1,029	185	247	252	85	2,265
Nephritis.....	44	196	126	1,145	116	140	111	163	2,041
Diphtheria.....	16	63	56	653	148	172	156	33	1,297
Influenza.....	20	70	84	509	57	69	67	64	940
Bronchitis.....	15	87	46	510	71	83	47	46	905
Congenital malformations.	9	49	35	493	81	90	60	45	862
Paralysis.....	36	144	96	382	52	18	48	33	809
Appendicitis.....	11	56	47	344	72	123	107	56	816
Anaemia chlorosis.....	9	44	37	511	34	34	31	35	735
Drowning.....	6	39	30	358	54	47	33	111	678
All other causes.....	368	1,709	2,004	9,520	1,586	1,941	1,848	1,259	20,235
Total.....	1,209	6,420	5,410	34,551	5,388	5,596	4,940	4,208	67,722
1922.									
Diseases of heart.....	116	584	491	3,756	442	371	320	542	6,622
Pneumonia.....	107	664	484	3,137	561	551	454	441	6,399
Cancer.....	86	539	322	2,609	446	349	322	445	5,118
Tuberculosis, lungs.....	97	562	355	1,631	307	256	245	417	3,870
Tuberculosis, other organs.	15	133	63	348	69	86	67	90	871
Premature birth.....	20	233	188	1,676	368	454	375	193	3,507
Diarrhoea and enteritis....	23	165	207	1,114	521	428	271	114	2,843
Senility.....	145	571	340	1,268	83	161	86	105	2,759
Cerebral haemorrhage, apoplexy.....	45	279	170	1,587	168	109	90	150	2,598
Diseases of arteries.....	21	140	111	2,051	157	128	126	155	2,889
Congenital debility.....	29	218	170	876	172	263	153	88	1,969
Nephritis.....	34	211	134	1,102	179	165	128	160	2,113
Diphtheria.....	9	45	44	411	150	201	141	23	1,024
Influenza.....	24	219	196	960	183	297	280	241	2,400
Bronchitis.....	13	95	39	446	73	56	85	44	851
Congenital malformations.	3	55	33	492	94	103	73	55	908
Paralysis.....	22	117	100	368	37	25	27	43	739
Appendicitis.....	4	57	39	331	89	126	126	68	840
Anaemia chlorosis.....	13	46	31	527	50	32	33	48	780
Diabetes mellitus.....	8	52	45	370	58	44	56	74	707
All other causes.....	279	1,694	1,596	8,974	1,547	1,914	1,806	1,411	19,221
Total.....	1,113	6,679	5,158	34,034	5,754	6,119	5,264	4,907	69,028

15—Deaths in the Registration Area of Canada from Twenty Leading Causes, 1921-1923—concluded.

Causes of Death.	P.E.I.	N.S.	N.B.	Ont.	Man.	Sask.	Alta.	B.C.	Total.
1923.									
Diseases of heart.....	121	681	475	4,373	489	381	371	580	7,471
Pneumonia.....	137	679	453	3,084	529	628	434	282	6,226
Cancer.....	82	528	298	2,725	416	358	292	452	5,151
Tuberculosis, lungs.....	77	557	356	1,676	311	261	281	411	3,930
Tuberculosis, other organs.....	13	93	81	313	84	90	77	96	847
Premature birth.....	17	221	140	1,484	270	376	300	190	2,998
Diarrhoea and enteritis.....	14	117	144	865	258	349	240	76	2,063
Senility.....	134	652	350	1,388	83	128	81	101	2,917
Cerebral haemorrhage, apoplexy.....	42	233	151	1,552	131	123	87	142	2,461
Diseases of arteries.....	30	227	139	2,129	193	121	112	223	3,174
Congenital debility.....	28	181	158	693	126	226	118	53	1,583
Nephritis.....	32	284	153	1,322	141	136	158	213	2,439
Diphtheria.....	11	29	33	316	122	211	103	26	851
Influenza.....	60	245	267	2,098	183	322	266	137	3,678
Bronchitis.....	10	75	39	392	104	92	44	33	789
Congenital malformations.....	9	58	26	525	95	101	105	69	988
Paralysis.....	35	118	103	328	33	17	27	43	704
Appendicitis.....	9	60	43	355	74	120	122	55	838
Anaemia chlorosis.....	9	35	35	523	48	34	26	42	752
Diabetes mellitus.....	9	63	39	398	57	46	37	61	710
All other causes.....	263	1,722	1,523	9,098	1,583	2,031	1,703	1,670	19,593
Total.....	1,142	6,858	5,006	35,637	5,330	6,151	4,984	4,955	70,063

NOTE.—Figures for 1923 are subject to revision.

Tuberculosis.—Deaths assigned to tuberculous affections numbered in the aggregate, 4,789 in 1921, 4,741 in 1922 and 4,777 in 1923, the latter figure being subject to revision. The males numbered 2,439 in 1921, 2,421 in 1922 and 2,430 in 1923; the females, 2,350, 2,320 and 2,347 respectively. The mortality rate for the registration area was 747 per million people in 1921, 724 per million in 1922 and 714 in 1923. In England the crude rate per million population was 1,131 in 1920. Tuberculosis caused in 1923 out of every 1,000 deaths, 79 in Prince Edward Island, 95 in Nova Scotia, 87 in New Brunswick, 56 in Ontario, 74 in Manitoba, 57 in Saskatchewan, 70 in Alberta and 102 in British Columbia.

16.—Deaths from Tuberculosis in the Registration Area, by Sex, 1921-1923.

Sites.	P.E.I.	N.S.	N.B.	Ont.	Man.	Sask.	Alta.	B.C.	Total
1921.									
Respiratory system. Total	112	579	344	1,731	305	256	260	316	3,903
M	57	274	147	856	165	131	133	211	1,974
F	55	305	197	875	140	125	127	105	1,929
Meninges and central nervous system.... Total	7	52	31	119	50	18	17	46	340
M	2	38	17	67	27	11	9	26	197
F	5	14	14	52	23	7	8	20	143
Intestines and peritoneum..... Total	4	22	18	85	23	17	20	16	205
M	3	10	8	31	11	4	12	6	85
F	1	12	10	54	12	13	8	10	120
Vertebral column.... Total	2	13	6	28	6	5	3	7	70
M	—	11	3	12	3	3	3	5	40
F	2	2	3	16	3	2	—	2	30
Joints..... Total	—	3	—	14	4	2	2	4	29
M	—	2	—	6	1	1	—	2	12
F	—	1	—	8	3	1	2	2	17
Other organs..... Total	2	11	10	48	11	6	5	6	99
M	—	7	6	26	5	2	3	4	53
F	2	4	4	22	6	4	2	2	46
Disseminated..... Total	1	22	4	58	21	18	6	13	143
M	—	8	2	32	9	14	3	10	78
F	1	14	2	26	12	4	3	3	65
Both sexes..... Total	128	702	413	2,083	429	322	313	408	4,789
M	62	350	183	1,030	221	166	163	264	2,439
F	66	352	230	1,053	199	156	150	144	2,350

16.—Deaths from Tuberculosis in the Registration Area, by Sex, 1921-1923—concluded.

Sites.	P.E.I.	N.S.	N.B.	Ont.	Man.	Sask.	Alta.	B.C.	Total.
1922.									
Respiratory system. Total	97	562	355	1,631	307	256	245	417	3,870
M	50	269	179	799	149	128	124	259	1,957
F	47	293	176	832	158	128	121	158	1,913
Meninges and central nervous system....Total	3	65	16	107	27	29	20	28	295
M	2	38	7	62	17	15	12	18	171
F	1	27	9	45	10	14	8	10	124
Intestines and peritoneum.....Total	6	20	23	95	14	19	19	24	220
M	1	10	9	35	3	11	8	15	92
F	5	10	14	60	11	8	11	9	128
Vertebral column....Total	2	9	5	31	5	6	6	8	72
M	2	4	4	15	1	4	4	7	41
F	—	5	1	16	4	2	2	1	31
Joints.....Total	2	8	1	13	2	2	3	6	37
M	1	6	1	4	—	2	1	6	21
F	1	2	—	9	2	—	2	—	16
Other organs.....Total	2	12	8	46	6	9	12	11	106
M	—	4	6	24	2	8	9	5	58
F	2	8	2	22	4	1	3	6	48
Disseminated.....Total	—	19	10	56	15	21	7	13	141
M	—	9	5	27	10	15	4	11	81
F	—	10	5	29	5	6	3	2	60
Both sexes.....Total	112	695	418	1,979	376	342	312	507	4,741
M	56	340	211	966	182	183	162	311	2,421
F	56	355	207	1,013	194	159	150	186	2,320
1923.									
Respiratory system. Total	77	557	356	1,676	311	261	272	411	3,921
M	28	289	152	840	153	127	148	267	2,004
F	49	268	204	836	158	134	124	144	1,917
Meninges and central nervous system....Total	3	36	21	115	30	29	24	33	291
M	—	21	10	59	14	16	6	21	147
F	3	15	11	56	16	13	18	12	144
Intestines and peritoneum.....Total	5	19	22	62	17	23	24	27	199
M	1	5	6	20	6	5	18	10	71
F	4	14	16	42	11	18	6	17	128
Vertebral column....Total	—	—	11	41	3	5	6	6	81
M	—	5	4	23	1	2	2	4	41
F	—	4	7	18	2	3	4	2	40
Joints.....Total	1	2	1	10	5	5	3	1	28
M	1	2	1	9	3	3	1	—	20
F	—	—	—	1	2	2	2	1	8
Other organs.....Total	2	11	13	36	8	9	12	17	108
M	2	8	8	21	6	5	6	13	69
F	—	3	5	15	2	4	6	4	39
Disseminated.....Total	2	16	13	49	21	19	8	12	140
M	2	7	4	26	11	12	3	7	72
F	—	9	9	23	10	7	5	5	68
Both sexes.....Total	90	650	437	1,989	395	351	358	507	4,777
M	34	337	185	998	194	170	190	322	2,430
F	56	313	252	991	201	181	168	185	2,347

NOTE.—The figures for 1923 are subject to revision.

Cancer.—Deaths assigned to cancer aggregated, in 1921, 4,826, 2,309 males and 2,517 females, and, in 1922, 5,092, 2,414 males and 2,678 females. In 1923 the number increased to 5,151, 2,406 males and 2,745 females. The crude rate was in 1921, 752, in 1922, 777 and in 1923, 777 per million population. Out of every 1,000 deaths in the registration area in 1923, 74 were assigned to cancer as compared with the same number in 1922. By provinces, the number of deaths due to cancer per 1,000 total deaths were in 1923 as follows: Prince Edward Island, 72; Nova Scotia, 77; New Brunswick, 60; Ontario, 76; Manitoba, 78; Saskatchewan, 58; Alberta, 59; British Columbia, 91.

17.—Deaths from Cancer in the Registration Area, by Sex, 1921-1923.

Sites.	P.E.I.	N.S.	N.B.	Ont.	Man.	Sask.	Alta.	B.C.	Total, registration area.
1921.									
Buccal cavity.....M	3	13	6	87	9	11	5	13	147
F	-	1	1	11	3	-	1	-	17
Stomach and liver.....M	21	96	76	483	118	89	85	90	1,058
F	13	90	47	377	78	48	28	49	730
Peritoneum, intestines, and rectum.....M	5	33	11	178	29	18	32	32	338
F	7	41	17	213	24	18	16	38	374
Female genital organs...F	4	38	23	236	43	29	20	40	433
Breast.....F	6	19	20	235	21	31	16	29	377
Skin.....M	1	11	7	41	4	3	6	5	78
F	-	3	-	25	-	4	-	-	32
Unspecified organs.....M	9	65	35	387	58	41	40	53	688
F	8	70	36	312	40	17	32	39	554
Totals.....M	39	218	135	1,176	218	162	168	193	2,309
F	38	262	144	1,409	209	147	113	195	2,517
Total, both sexes.....	77	480	279	2,585	427	309	281	388	4,826
1922.									
Buccal cavity.....M	5	20	13	80	14	13	10	12	167
F	-	4	1	14	-	2	-	4	25
Stomach and liver.....M	18	109	64	476	109	97	78	103	1,054
F	14	112	60	391	87	56	43	73	836
Peritoneum, intestines, and rectum.....M	6	23	23	203	33	29	23	34	374
F	5	44	30	235	22	14	29	36	415
Female genital organs...F	4	36	15	243	46	25	36	45	450
Breast.....F	11	34	23	231	33	24	21	37	414
Skin.....M	2	19	7	49	7	4	10	6	104
F	1	4	5	27	-	1	2	2	42
Unspecified organs.....M	9	67	43	379	60	53	45	59	715
F	10	62	37	277	34	27	20	29	496
Totals.....M	40	238	150	1,187	223	196	166	214	2,414
F	45	296	171	1,418	222	149	151	226	2,678
Total, both sexes.....	85	534	321	2,605	445	345	317	440	5,092
1923.									
Buccal cavity.....M	7	27	9	106	8	10	16	11	194
F	2	4	2	28	2	-	-	3	41
Stomach and liver.....M	15	121	69	479	114	106	70	115	1,089
F	16	101	46	459	83	62	47	66	880
Peritoneum, intestines, and rectum.....M	7	36	13	200	25	24	21	44	370
F	8	38	25	229	26	21	27	26	400
Female genital organs...F	5	46	34	283	37	37	22	47	511
Breast.....M	-	-	-	1	-	1	-	-	2
F	3	28	14	278	28	21	27	33	432
Skin.....M	3	12	6	55	-	5	4	5	90
F	2	2	1	26	1	1	-	6	39
Unspecified organs.....M	7	67	41	349	57	43	35	62	661
F	7	46	38	232	35	27	23	34	442
Totals.....M	39	263	138	1,190	204	189	146	237	2,406
F	43	265	160	1,535	212	169	146	215	2,745
Total, both sexes.....	82	528	298	2,725	416	358	292	452	5,151

NOTE.—The figures for 1923 are subject to revision.

Comparative Death Rates of Different Countries.—In Table 18 will be found a comparative statement of the crude death rates of various countries and provinces for the latest available year. It is worthy of note that three Canadian provinces have the lowest death rates in the list. The low death rates are in all three cases due in part to a favourable age distribution of population.

18.—Crude Death Rates of Various Countries in Recent Years.

Country.	Year.	Crude Death Rate.	Country.	Year.	Crude Death Rate.
Saskatchewan.....	1923	7.7	Quebec.....	1922	13.2
Alberta.....	1923	8.0	Irish Free State.....	1923	13.3
Manitoba.....	1923	8.4	Latvia.....	1923	13.4
Western Australia.....	1923	8.4	Prussia.....	1921	13.7
New Zealand.....	1923	9.0	Germany.....	1923	13.9
British Columbia.....	1923	9.1	Belgium.....	1922	13.9
New South Wales.....	1923	9.6	Finland.....	1921	14.0
South Australia.....	1923	9.6	North Ireland.....	1923	14.7
Union of South Africa (whites)...	1923	9.7	Argentina.....	1921	14.8
Queensland.....	1923	9.8	Newfoundland.....	1920	16.2
Australia.....	1923	9.9	Austria.....	1922	16.3
Tasmania.....	1923	9.9	France.....	1923	17.0
Netherlands.....	1923	9.9	Esthonia.....	1922	17.1
Canada (registration area).....	1923	10.6	Italy.....	1921	17.5
Victoria.....	1923	10.7	Czechoslovakia.....	1922	17.7
Sweden.....	1923	11.4	Hungary.....	1923	19.2
Norway.....	1923	11.5	Spain.....	1923	20.7
England and Wales.....	1923	11.6	Serbia.....	1912	21.1
Ontario.....	1923	11.8	Bulgaria.....	1920	21.2
United Kingdom.....	1923	11.9	Japan.....	1922	22.3
Denmark.....	1922	11.9	Portugal.....	1920	22.5
United States.....	1922	11.9	Rumania.....	1922	22.8
Uruguay.....	1921	12.2	Jamaica.....	1922	22.9
New Brunswick.....	1923	12.7	Egypt.....	1922	25.2
Switzerland.....	1921	12.7	Ceylon.....	1922	27.8
Nova Scotia.....	1923	12.9	Chile.....	1922	28.4
Scotland.....	1923	12.9	British India.....	1921	29.9
Prince Edward Island.....	1923	13.0	European Russia.....	1921	38.8

Infantile and Maternal Mortality.

In recent years a great part of the energy devoted by the medical profession and sanitarians to effect a decline in the death rate has gone to reduce infantile mortality, and in this field a large measure of success has been attained. In Canada, both the Dominion, provincial and municipal health authorities have taken part in the struggle to reduce infantile mortality, and usually, in the absence of epidemics, each year is showing an improvement. Even in the four years for which the figures are available for the registration area, there is evident a considerable decline in infant mortality. In 1920 more than 10 p.c. of all children born died in the first year of life; in 1921 the proportion dropped to 8.8 p.c. or 14,893 deaths in a total of 168,979 births; in 1922 the infantile death rate showed a further betterment, dropping to 8.7 p.c. or 14,256 deaths to 164,194 births, while in 1923 it showed a slight increase to 8.8 p.c. Deaths of children under one year of age constituted 19.7 p.c. of all deaths in 1923, as compared with 20.6 p.c. in 1922. Table 19 shows that in all provinces but Manitoba and British Columbia the infant death rate per 1,000 living births was higher in 1923 than in the preceding year.

19.—Infantile Mortality, by Provinces, together with the rate per 1,000 Living Births, 1920, 1921, 1922 and 1923.

Provinces.	Infant Deaths.				Infant Death Rate per 1,000 Births.			
	1920.	1921.	1922.	1923.	1920.	1921.	1922.	1923.
	No.	No.	No.	No.				
Prince Edward Island.....	184	180	153	174	80.0	83.5	70.8	88.9
Nova Scotia.....	1,536	1,311	1,239	1,135	116.5	100.7	97.6	97.8
New Brunswick.....	1,454	1,299	1,194	1,135	134.9	113.3	103.3	106.4
Ontario.....	7,497	6,763	5,921	5,950	103.7	91.2	82.9	84.9
Manitoba.....	1,882	1,533	1,669	1,410	102.7	83.0	94.4	85.6
Saskatchewan.....	1,958	1,814	1,913	1,918	85.7	80.6	85.6	93.4
Alberta.....	1,545	1,391	1,475	1,415	93.5	84.0	91.3	94.5
British Columbia.....	638	602	692	658	60.8	56.5	68.1	66.8
Canada (registration area).....	16,694	14,893	14,256	13,795	100.1	88.1	86.8	88.4
Quebec.....	14,134	11,387	11,297	—	163.7	128.3	127.8	—
Canada (exclusive of the Territories)	30,828	26,280	25,553	—	121.8	102.0	101.2	—

NOTE.—The figures for 1923 are subject to revision.

Infantile Mortality by Sex.—Table 20 shows that while male births in 1922 exceeded female births by 3,920, yet owing to the greater mortality among male infants, their net advantage at the end of the year was only 1,826. For the registration area, the ratio of deaths to 1,000 births was 97 for males, as against 76 for females, and 87 per 1,000 births, both sexes.

20.—Number and Ratio of Infant Deaths in the Registration Area to Living Births, by Sex and Provinces, 1922.

Provinces.	Males.			Females.			Both Sexes.
	Living Births.	Deaths under 1 yr.		Living Births.	Deaths under 1 yr.		Deaths per 1,000 Births.
		Number.	Per 1,000 Births.		Number.	Per 1,000 Births.	
Prince Edward Island.....	1,104	96	87.0	1,056	57	54.0	70.8
Nova Scotia.....	6,630	724	190.2	6,063	515	84.9	97.6
New Brunswick.....	5,955	672	112.9	5,609	522	93.1	103.3
Ontario.....	36,495	3,414	93.5	24,935	2,507	71.8	82.9
Manitoba.....	8,926	937	105.0	8,753	732	83.6	94.4
Saskatchewan.....	11,435	1,079	94.4	10,904	834	76.5	85.6
Alberta.....	8,291	838	102.0	7,944	637	80.2	91.3
British Columbia.....	5,293	415	78.4	4,873	277	56.8	68.1
Totals.....	84,057	8,175	97.3	80,137	6,081	75.9	86.8

Infantile Mortality by Cause.—More than 82 p.c. of the total infant mortality in 1921 was attributed to 12 diseases, being 83 p.c. for male children and 82 p.c. for female children. In both 1922 and 1923 the same 12 causes were responsible for more than 83 p.c. of the infant mortality. In Table 21 are given statistics by causes for the years 1922 and 1923.

21.—Infantile Mortality by Sex in the Registration Area, by Principal Causes of Death, 1922 and 1923.

Cause of Death.	1922.			1923.		
	Male.	Female.	Total.	Male.	Female.	Total.
Premature birth.....	1,660	1,261	2,921	1,724	1,274	2,998
Congenital debility.....	1,154	815	1,969	926	657	1,583
Pneumonia.....	904	670	1,574	969	754	1,723
Bronchitis.....	105	96	201	120	97	217
Congenital malformations.....	506	387	893	489	431	920
Convulsions.....	292	208	500	229	170	399
Whooping cough.....	145	139	284	233	239	472
Injury at birth.....	353	233	586	299	211	510
Gastro-intestinal diseases.....	1,232	948	2,180	972	664	1,636
Communicable diseases.....	381	267	648	502	367	869
Syphilis.....	35	31	66	45	19	64
Meningitis.....	57	42	99	70	33	103
Other diseases.....	1,351	984	2,335	1,326	975	2,301
Total.....	8,175	6,081	14,256	7,904	5,891	13,795
Rate per 1,000 living births.....	97.3	75.9	86.8	98.6	77.6	88.4

Infantile Mortality in Various Countries.—The rate of infantile mortality to living births has been greatly reduced in civilized countries by the recent advances in medical science and in sanitation. The low record is held at the present time by New Zealand, where in 1923 the rate of infantile mortality was only 43.8 per 1,000 living births as compared with 68 in 1905. Queensland, with an infantile mortality rate of 53.9 in 1923, made a remarkable record for a sub-tropical country, while Norway and the Netherlands with rates of 54.3 and 56.9 in the latest available years, were the lowest among European countries.

As showing the improvement in recent years, it may be stated that the rate of infantile mortality in England and Wales has been reduced from 128 per 1,000 living births in 1905 to 69 in 1923, while the rate in Germany has declined from 196 in 1904 to 131.9 in 1923. In the Netherlands, again, the rate has declined from 131 per 1,000 living births in 1905 to 56.9 in 1923. Statistics are given by leading countries in Table 22.

22.—Rate of Infantile Mortality per 1,000 Living Births in Various Countries of the World in Recent Years.

Country.	Year.	Rate of Infant Mortality	Country.	Year.	Rate of Infant Mortality.
New Zealand.....	1923	43.8	Finland.....	1921	93.6
Queensland.....	1923	53.9	Alberta.....	1923	94.5
Norway.....	1921	54.3	France.....	1923	96.1
Western Australia.....	1923	56.2	Nova Scotia.....	1923	97.8
Netherlands.....	1923	56.9	Argentina.....	1915	103.2
Tasmania.....	1922	57.5	New Brunswick.....	1923	106.4
South Australia.....	1923	60.3	Belgium.....	1922	107.0
Australia.....	1923	60.5	Uruguay.....	1921	107.1
New South Wales.....	1923	61.0	Quebec.....	1922	127.8
Sweden.....	1918	64.6	Newfoundland.....	1920	128.7
Victoria.....	1923	65.7	Estonia.....	1922	129.1
Irish Free State.....	1923	65.9	Germany.....	1923	131.9
British Columbia.....	1923	66.8	Prussia.....	1922	134.0
England and Wales.....	1923	69.0	Egypt.....	1922	140.0
United Kingdom.....	1923	70.2	Spain.....	1922	141.0
Switzerland.....	1921	74.0	Serbia.....	1911	146.0
North Ireland.....	1923	75.6	Italy.....	1921	147.5
United States.....	1922	76.0	Bulgaria.....	1911	156.0
Scotland.....	1923	79.0	Japan.....	1922	166.3
Union of South Africa (whites)...	1923	81.8	Japan.....	1922	177.0
Ontario.....	1923	84.9	Hungary.....	1923	185.7
Manitoba.....	1923	85.6	Ceylon.....	1922	188.0
Canada (registration area).....	1923	88.4	Austria.....	1921	205.8
Latvia.....	1923	88.4	Rumania.....	1922	207.2
Prince Edward Island.....	1923	88.9	Chile.....	1922	240.2
Denmark.....	1921	91.0	European Russia.....	1909	248.0
Saskatchewan.....	1923	93.4			

Infantile Mortality in Cities.—In former times cities were considered to be "the graveyards of population." The number of deaths, consequent upon the rapid spread of infectious diseases, was generally greater than the number of births and it was the prevailing opinion that cities would naturally come to an end if they were not being constantly reinforced by fresh young life from the prolific countryside. The unhealthiness of cities was especially destructive of infant life, and it is one of the greatest triumphs of our time that city life is in our days, if not as healthy, yet not necessarily more dangerous to human life and especially to infant life, than life in the country as a whole.

To give particular examples, the rate of infantile mortality in London, England, was in 1923, 60 per 1,000 living births as compared with a rate for England and Wales of 69 per 1,000. New York City experienced in 1923 an infantile mortality of 66 per 1,000 as against a rate of 76 per 1,000 for the registration area of the United States in the previous year. The department of the Seine (Paris) had in 1923 an infantile mortality of 90 per 1,000 living births, as compared with 96.1 for the 77 departments of France for which the vital statistics were collected.

In Canada, our experience, except in the province of Quebec, has also up to the present been rather favourable to the cities. Montreal had in 1922 an infantile mortality of 162 per 1,000 living births as compared with 128 for the province of Quebec. On the other hand, Toronto had in 1922 an infantile mortality of 78.0 per 1,000 living births as against 82.9 for the province of Ontario, and this is typical of the other larger cities of the Dominion.

23.—Rate of Infantile Mortality per 1,000 Living Births in Great Cities of the World in Recent Years.

City.	Year.	Rate of Infantile Mortality.	City.	Year.	Rate of Infantile Mortality.
Amsterdam.....	1923*	39	Johannesburg.....	1923	90
Auckland.....	1922	44	Paris.....	1923	90
Westmount.....	1922	46	Glasgow.....	1923	90
Stockholm.....	1923	50	Cape Town.....	1923	91
Durban (Europeans only).....	1923	55	Frankfort-on-Main.....	1922	94
Victoria, B.C.....	1922	55.8	Saskatoon.....	1922	94
Adelaide.....	1922	58	Regina.....	1922	96.2
Melbourne.....	1922	58	Moncton.....	1922	96.6
Perth, W. Australia.....	1922	58	Liverpool.....	1923	98
Brisbane.....	1923	59	Monte Video.....	1921	98
London, England.....	1923	60	Belfast.....	1923	101
Wellington.....	1921	61	Fredericton.....	1922	102.5
Sydney, N.S.W.....	1923	64	Hamburg.....	1923	104
New York.....	1923	66	Aberdeen.....	1921	108
Cork.....	1923	66	Dresden.....	1922	116
Christiania.....	1922	66	Dublin.....	1923	117
Vancouver.....	1922	66.6	Sherbrooke.....	1922	123
London, Ont.....	1922	67.7	Ottawa.....	1922	127.7
Copenhagen.....	1923	68	Munich.....	1922	131
Birmingham.....	1923	71	Leipzig.....	1923	134
Brandon.....	1922	71.1	Verice.....	1923	136
Hobart.....	1922	72	Berlin.....	1923	144
Calgary.....	1922	77.5	St. Johns, Nfld.....	1920	146
La Plata.....	1920	78	Warsaw.....	1923	147
Toronto.....	1922	78	Cologne.....	1923	147
Hamilton.....	1922	80.1	Vienna.....	1922	149
Edinburgh.....	1923	82	Tokio.....	1921	153
Antwerp.....	1923	83	Montreal.....	1922	162
Manchester.....	1923	85	Osaka.....	1920	167
Riga.....	1923	85	Breslau.....	1923	171
Washington.....	1919	85	Sao Paulo.....	1923	182
Fredericksburg.....	1921	86	Quebec.....	1922	187
Chicago.....	1923	87	Alexandria.....	1922	194
Winnipeg.....	1922	88.9	Madras.....	1923	253
Sheffield.....	1923	89	Bombay.....	1922	402

Maternal Mortality.—A subject of cognate interest with infantile mortality is that of maternal mortality. The maternal mortality in the eight provinces constituting the registration area of Canada is shown by age groups in Table 24, and by causes in Table 25.

24.—Maternal Mortality in the Registration Area, by Age Groups, 1923, with Totals for 1921 and 1922.

Age groups.	P.E.I.	N.S.	N.B.	Ont.	Man.	Sask.	Alta.	B.C.	Total.
1923.									
15-19.....	1	6	8	16	3	3	6	3	46
20-24.....	—	10	17	56	11	18	11	13	136
25-29.....	1	16	4	82	12	23	116	6	160
30-39.....	3	44	15	174	40	53	39	33	401
40-49.....	—	8	4	41	10	17	11	8	99
50 and over.....	—	—	1	—	—	—	—	—	1
Age not stated.....	—	—	—	—	—	—	—	—	—
Totals, 1923.....	5	84	49	369	76	114	83	63	843
Totals, 1922.....	7	70	59	370	99	125	109	59	898
Totals, 1921.....	7	56	47	387	81	128	111	51	868
Rate per 1,000 living births, 1923.....	5.4	7.2	4.6	5.3	4.6	5.6	5.5	6.4	5.4
Rate per 1,000 living births, 1922.....	3.7	5.5	5.1	5.2	5.6	5.7	6.9	6.2	5.5
Rate per 1,000 living births, 1921.....	3.2	4.3	4.1	5.2	4.4	5.7	6.7	4.8	5.1

NOTE.—The figures for 1923 are subject to revision.

25.—Maternal Mortality in the Registration Area, by Causes of Death, 1923, with Totals for 1922.

Causes of death.	P.E.I.	N.S.	N.B.	Ont.	Man.	Sask.	Alta.	B.C.	Total, registration area.
Accidents of pregnancy—total.....	—	15	4	53	4	19	15	10	120
(a) Abortion.....	—	5	1	20	2	11	7	6	52
(b) Ectopic gestation.....	—	6	1	11	1	3	5	3	30
(c) Other accidents of pregnancy.....	—	4	2	22	1	5	3	1	38
Puerperal hæmorrhage.....	2	20	2	28	16	9	7	9	93
Other accidents of childbirth—total.....	—	5	4	29	4	10	9	7	68
(a) Caesarean section.....	—	1	—	3	—	2	1	3	10
(b) Other surgical operations and instrumental delivery.....	—	—	—	2	1	—	1	1	5
(c) Others under this title.....	—	4	4	24	3	8	7	3	53
Puerperal sepsis.....	—	22	12	116	31	43	30	10	264
Phlegmasia alba dolens: puerperal embolism or sudden death in puerperium.....	—	7	6	38	5	12	4	7	79
Puerperal albuminuria and convulsions.....	3	14	17	97	15	20	16	14	196
Following childbirth (not otherwise defined).....	—	1	6	7	1	1	2	6	24
Puerperal diseases of the breast.....	—	—	—	1	—	—	—	—	1
Totals, 1923.....	5	84	49	369	76	114	83	63	843
Totals, 1922.....	7	70	59	370	99	125	109	59	898

NOTE.—1923 figures are subject to revision.



III.—IMMIGRATION.

Immigration has throughout Canadian history played a great part in reinforcing the population, especially the English-speaking population. While the great majority of French-Canadians can trace their genealogy back to ancestors who left the Old World 200 or 250 years ago, or even longer, the great bulk of English-speaking Canadians are comparative newcomers both to Canada and to this continent, though a considerable number of the United Empire Loyalist families had been resident in the old colonies for generations before they moved north to establish English-speaking settlements in Canada. During the middle third of the nineteenth century there was a great English-speaking immigration which settled the province of Ontario and made it for the first time more populous than the sister province of Quebec, thus bringing about the agitation for representation by population. Thereafter immigration slackened until the dawn of the twentieth century brought another flood of settlers to the newly opened territories of the great Northwest, resulting in an increase of population between the censuses of 1901 and 1911 greater than the combined increase of the three decades from 1871 to 1901.

1.—Statistics of Immigration.

Immigration during the second decade of the twentieth century promised at its commencement to be even greater than during the first. In its first three years no fewer than 1,141,547 persons entered Canada for purposes of settlement. If this rate had been maintained, the population of Canada in 1921 would have been in excess of ten millions instead of being less than nine millions. The war, which commenced on August 4, 1914, dried up the sources of our immigration in Great Britain and Continental Europe, where every able-bodied man was needed for the defence of his country. Immigrant arrivals from the United Kingdom in 1918 only numbered some 3,000, as compared with 150,000 in 1913; from Continental Europe, immigrant arrivals numbered only about 3,000 in 1916, as compared with approximately 135,000 in 1914. Since the war, immigration, though increasing, has never approached that of the pre-war period, which is probably a fortunate circumstance, since the capital necessary to set in employment such great bodies of labourers as came to Canada in 1912 and 1913 could hardly have been secured.

Immigration to Canada, as to other new countries, is generally greatest in "boom" periods, when capital as well as labour is leaving the older countries for the newer in order to secure the more remunerative investments generally to be found in virgin territories where the natural resources are still unexploited. In periods of depression, however, the sending abroad of both capital and labour is diminished, both preferring at such times to endure the evils which they know at home rather than take the risks of a new departure at a distance. This proposition is aptly illustrated by the statistics of Table 1, which show that during the past 25 years, immigration was at its minimum in the year of deepest depression, 1897, that it steadily increased from that time forward until 1908, that a decline took place in the fiscal year ended March 31, 1909, on account of the short depression of 1908, that thereafter immigration steadily increased till 1913, while the fiscal year ended March 31, 1914, showed a decline due to the depression which occurred in the year preceding the war. In the fiscal years 1915 to 1919 political rather than economic conditions restricted immigration, but with the expansion of business at the end of the war our immigration was more than doubled, while the depression

which characterized 1921 and 1922 is reflected in the declining immigration of the fiscal years ended March 31, 1922 and 1923. The improvement in business conditions in 1923 has been reflected in an increase of immigration during the fiscal year ending March 31, 1924. During this period 148,560 settlers entered Canada as compared with less than half that number in the preceding year.

The number of immigrant arrivals in Canada from the United Kingdom, the United States and other countries is given by years from 1897 in Table 1.

1.—Number of Immigrant Arrivals in Canada from the United Kingdom, the United States and other countries, fiscal years 1897-1924.

Fiscal Years.	Immigrant Arrivals from			Total.	Fiscal Years.	Immigrant Arrivals from			Total.
	United Kingdom.	United States.	Other Countries.			United Kingdom.	United States.	Other Countries.	
1897 ¹	11,383	2,412	7,921	21,716	1911.....	123,013	121,451	66,620	311,084
1898 ¹	11,173	9,119	11,608	31,900	1912.....	138,121	133,710	82,406	354,237
1899 ¹	10,660	11,945	21,938	44,543	1913.....	150,542	139,009	112,881	402,432
1900 ²	5,141	8,543	10,211	23,895	1914.....	142,622	107,530	134,726	384,878
1901.....	11,810	17,987	19,352	49,149	1915.....	43,276	59,779	41,734	144,789
1902.....	17,259	26,388	23,732	67,379	1916.....	8,664	36,937	2,936	48,537
1903.....	41,792	49,473	37,099	128,364	1917.....	8,282	61,389	5,703	75,374
1904.....	50,374	45,171	34,786	130,331	1918.....	3,178	71,314	4,582	79,074
1905.....	65,359	43,543	37,364	146,266	1919.....	9,914	40,715	7,073	57,702
1906.....	86,796	57,796	44,472	189,064	1920.....	59,603	49,656	8,077	117,336
1907 ³	55,791	34,659	34,217	124,667	1921.....	74,262	48,059	26,156	148,477
1908.....	120,182	58,312	83,975	262,469	1922.....	39,020	29,345	21,634	89,999
1909.....	52,901	59,832	34,175	146,908	1923.....	34,508	22,007	16,372	72,887
1910.....	59,790	103,798	45,206	208,794	1924.....	72,919	20,521	55,120	148,560

¹ Calendar year. ² Six months, January to June, inclusive. ³ Nine months ended March 31.

NOTE.—See table on page 95 for an estimate of the movement of population between the censuses of 1901 and 1921.

Nationality of Immigrant Arrivals.—Immigration, which was at a low ebb during the war period, may once more become, when normal conditions are restored, the chief means of reinforcing our population and filling up the vast waste spaces of Canada. But where any considerable immigration into a democratic country occurs, the racial and linguistic composition of that immigration becomes of paramount importance. Canadians generally prefer that settlers should be of a readily assimilable type, already identified by race or language with one or other of the two great races now inhabiting this country—and thus prepared for the assumption of the duties of democratic Canadian citizenship. Since the French are not to any great extent an emigrating people, this means in practice that the great bulk of the preferable settlers are those who speak the English language—those coming from the United Kingdom or the United States. Next in order of readiness of assimilation are the Scandinavians and the Dutch, who readily learn English and are already acquainted with the working of free democratic institutions; a few years ago most Canadians would have included the Germans in the same category. Settlers from Southern and Eastern Europe, however desirable from the purely economic point of view, are less readily assimilated, and the Canadianizing of the people from these regions who came to Canada in the first fourteen years of this century is a problem both in the agricultural Prairie Provinces and in the cities of the East. Less assimilable still, according to the general opinion of Canadians, are those who come to Canada from the Orient.

On the whole the great bulk of Canadian immigration of the past generation has been drawn from the English-speaking countries, and from those continental European countries where the population is ethnically nearly related to the British. The nationalities of the immigrant arrivals of the 8 years from 1917 to 1924 are shown in Table 2, while in Table 3 the number of arrivals is given by ports for the years 1920 to 1924.

2.—Immigrant Arrivals in Canada, by Nationalities and Races, fiscal years 1917-1924.

Nationalities.	1917.	1918.	1919.	1920.	1921.	1922.	1923.	1924.
British Subjects—British Isles—								
English.....	5,174	2,477	7,954	45,173	47,687	23,225	19,188	37,030
Irish.....	958	174	336	2,751	6,384	3,572	3,668	9,719
Scottish.....	2,002	473	1,518	10,997	19,248	11,596	11,071	25,057
Welsh.....	88	54	106	682	943	627	581	1,113
Total, British Isles.....	8,282	3,178	9,914	59,603	74,262	39,020	34,508	72,919
Other British—								
Africans, South.....	1	4	—	23	63	32	41	60
Australians.....	18	34	35	88	90	76	67	112
Bermudians.....	16	10	1	1	8	2	7	4
East Indians.....	—	—	—	—	10	13	21	40
Jamaicans.....	6	24	2	3	18	13	30	24
Maltese.....	109	144	2	405	140	34	57	148
Newfoundlanders.....	1,243	1,199	512	443.	1,042	367	1,552	5,346
New Zealanders.....	12	13	15	31	40	25	33	50
Total, Other British.....	1,405	1,428	567	994	1,411	562	1,808	5,784
Grand Total, British Subjects..	9,687	4,606	10,481	60,597	75,673	39,582	36,316	78,703
European Continental Nationalities—								
Albanians.....	—	—	—	—	6	6	1	7
Austrians.....	—	—	—	5	26	14	23	82
Belgians.....	126	19	48	1,532	1,645	503	316	1,662
Bulgarians.....	1	—	—	4	308	152	101	2,757
Czechoslovaks.....	151	94	59	154	595	183	119	1,149
Dutch.....	—	—	—	—	—	—	12	51
Estonians.....	249	113	2	44	1,401	274	1,171	7,640
Finnish.....	199	114	222	1,584	861	332	281	870
French.....	9	1	1	12	137	178	216	1,769
Greeks.....	258	45	4	39	357	209	177	292
Hebrews, n.e.s.....	28	2	15	32	920	2,336	659	948
Hebrews, Austrian.....	—	—	—	—	1	1	1	1
Hebrews, German.....	—	—	—	—	—	—	1	5
Hebrews, Polish.....	—	—	—	36	1,600	5,216	1,379	1,208
Hebrews, Russian.....	108	30	7	48	2,422	851	753	2,093
Hungarians.....	—	—	—	—	23	48	23	364
Italians.....	758	189	49	1,165	3,880	2,413	2,074	6,379
Jugo-Slavs.....	2	—	1	12	89	180	136	1,306
Latvians.....	—	—	—	—	—	—	1	11
Lithuanians.....	—	—	—	—	—	19	106	236
Luxemburgers.....	—	—	—	16	16	5	3	85
Polish.....	12	—	4	76	4,061	2,707	2,921	4,211
Portuguese.....	1	1	—	3	4	—	2	—
Rumanians.....	4	—	—	21	969	759	427	1,431
Russians.....	25	42	42	51	1,077	321	222	3,058
Scandinavians—								
Danes.....	145	74	44	233	511	541	382	1,355
Icelanders.....	9	3	12	11	50	31	21	27
Norwegians.....	303	235	91	179	429	480	507	2,424
Swedes.....	332	156	101	241	715	442	948	3,536
Spanish.....	76	28	12	15	202	6	15	39
Swiss.....	30	12	11	100	235	187	152	1,585
Turks.....	5	—	—	1	8	3	3	27
Ukrainians.....	—	—	2	—	491	89	36	832
Total European Continental Nationalities.....	2,831	1,158	727	5,615	20,863	18,513	13,208	47,207

2.—Immigrant Arrivals in Canada, by Nationalities and Races, fiscal years 1917-1924—concluded.

Nationalities.	1917.	1918.	1919.	1920.	1921.	1922.	1923.	1924.
Non-European Nationalities or Races—								
Arabians.....	—	—	—	—	8	5	2	—
Argentianians.....	—	—	—	2	4	—	4	—
Armenians.....	3	2	—	10	85	70	59	486
Chinese.....	393	769	4,333	544	2,435	1,746	711	674
Cubans.....	3	1	—	2	—	—	—	1
Egyptians.....	—	—	—	—	9	2	—	3
Japanese.....	648	883	1,178	711	532	471	369	448
Mexicans.....	—	1	3	—	1	—	—	1
Negroes.....	98	35	22	61	144	42	42	42
Persians.....	—	2	2	—	1	9	1	5
Syrians.....	9	2	—	18	443	123	91	286
West Indians.....	293	273	220	62	110	24	44	37
Other Countries.....	—	—	—	3	—	—	1	12
Total Non-European Nationalities.....	1,447	1,968	5,758	1,413	3,772	2,492	1,324	1,995
From the United States¹.....	61,409	71,342	40,736	49,711	48,169	29,412	22,039	20,655
Grand Total.....	75,374	79,074	57,702	117,336	148,477	89,999	72,887	148,560

¹ Includes United States citizens via ocean ports.

3.—Total Immigration to Canada, by Ports, fiscal years 1920-1924.

Ports.	1920.	1921.	1922.	1923.	1924.
Quebec.....	37,125	65,969	40,730	31,717	71,290
St. John.....	13,453	16,676	8,318	8,580	23,533
Halifax.....	11,161	10,282	7,119	5,039	19,279
North Sydney.....	414	901	318 ¹	1,426	4,884
Sydney.....	—	—	—	69	113
Montreal.....	—	—	—	171	437
Vancouver.....	674	2,215	1,448	797	1,130
Victoria.....	834	1,016	1,020	614	683
Via United States Ports—					
New York.....	3,765	3,021	1,543	2,430	6,157
Boston.....	250	311	158	87	249
Portland.....	4	2	—	—	1
Philadelphia.....	—	25	—	—	333
From the United States.....	49,656	48,059	29,345	22,007	20,521
Total.....	117,336	148,477	89,999	72,887	148,560

¹ Includes Sydney.

Destination of Immigrant Arrivals.—The destinations of the immigrant arrivals in Canada are given for the period from 1901 to 1924 in Table 4, which may be compared with the census tables on pages 86 and 87 showing the increase of population in the decades between 1901 and 1921. While immigration to the Maritime Provinces during the period was comparatively small, that to Quebec was very considerable, and that to Ontario very large. The lion's share of the immigrant arrivals, however—over 1,566,000 persons—gave the Prairie Provinces as their destination, and 421,028 stated their destination as British Columbia or the Yukon.

4.—Destination of Immigrants into Canada, by Provinces, fiscal years 1901-1924.

Fiscal Years.	Maritime Provinces.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia and Yukon Terr'y.	Not shown.	Totals.
1901.....	2,144	10,216	6,208	11,254	14,160		2,600	2,567	49,149
1902.....	2,312	8,817	9,798	17,422	22,199		3,483	3,348	67,379
1903.....	5,821	17,040	14,854	39,535	43,898		5,378	1,838	128,364
1904.....	5,448	20,222	21,266	34,911	40,397		6,994	1,093	130,331
1905.....	4,128	23,666	35,811	35,387	39,289		6,008	1,977	146,266
1906.....	6,381	25,212	52,746	35,648	28,728	26,177	12,406	1,766	189,064
1907 (9 mos.).....	6,510	18,319	32,654	20,273	15,307	17,559	13,650	395	124,667
1908.....	10,360	44,157	75,133	39,789	30,590	31,477	30,768	195	262,469
1909.....	6,517	19,733	29,265	19,702	22,146	27,651	21,862	32	146,908
1910.....	10,644	28,524	46,129	21,049	29,218	42,509	30,721	—	208,794
1911.....	13,236	42,914	80,035	34,653	40,763	44,782	54,701	—	311,084
1912.....	15,973	60,602	100,227	43,477	46,158	45,957	51,843	—	354,237
1913.....	19,806	64,835	122,798	43,813	45,147	48,073	57,990	—	402,432
1914.....	16,730	80,368	123,792	41,640	40,999	43,741	37,608	—	384,878
1915.....	11,104	31,053	44,873	13,196	16,173	18,263	10,127	—	144,789
1916.....	5,981	8,274	14,743	3,487	6,001	7,215	2,836	—	48,537
1917.....	5,710	10,930	26,078	5,247	9,874	12,418	5,117	—	75,374
1918.....	5,247	9,059	23,754	6,252	12,382	16,821	5,559	—	79,074
1919.....	3,860	6,772	13,826	4,862	8,552	11,640	8,190	—	57,702
1920.....	5,554	13,078	39,344	11,387	14,287	20,000	13,686	—	117,336
1921.....	6,353	21,100	62,572	12,649	13,392	17,781	14,630	—	148,477
1922.....	3,222	13,724	34,590	8,904	9,884	11,825	7,840	—	89,999
1923.....	3,298	9,343	30,444	6,037	8,186	8,798	6,781	—	72,887
1924.....	7,940	19,979	65,280	21,451	13,200	10,430	10,280	—	148,560
Total	184,279	597,937	1,106,220	532,025	1,034,057	421,028	13,211	3,888,757	

Occupation of Immigrant Arrivals.—As stated below in the paragraphs dealing with immigration policy, the settlers most universally acceptable to Canadians are those who settle on the land or those females who enter domestic service. In Table 5 will be found statistics of the occupations of immigrant arrivals in Canada during the fiscal years ended March 31, 1923 and 1924.

5.—Occupation and Destination of Total Immigrant Arrivals in Canada for the fiscal years 1923 and 1924.

Description.	1923.			1924.		
	Via Ocean Ports.	From the United States.	Totals.	Via Ocean Ports.	From the United States.	Totals.
Farmers and farm labourers—						
Men.....	11,370	6,380	17,750	39,748	5,281	45,029
Women.....	2,536	2,070	4,606	4,183	1,405	5,588
Children.....	2,242	2,544	4,786	3,982	1,709	5,691
General labourers—						
Men.....	2,675	884	3,559	13,508	1,768	15,276
Women.....	388	229	617	1,344	287	1,631
Children.....	344	169	513	1,184	246	1,430
Mechanics—						
Men.....	4,158	1,382	5,540	15,110	1,554	16,664
Women.....	1,293	386	1,679	3,103	356	3,459
Children.....	836	351	1,187	1,894	302	2,196
Clerks, traders, etc.—						
Men.....	1,003	688	1,691	3,745	1,302	5,047
Women.....	651	315	966	1,935	573	2,508
Children.....	237	181	418	476	296	772
Miners—						
Men.....	920	175	1,095	2,578	214	2,792
Women.....	111	30	141	247	37	284
Children.....	142	25	167	259	37	296

5.—Occupation and Destination of Total Immigrant Arrivals in Canada for the fiscal years 1923 and 1924—concluded.

Description.	1923.			1924.		
	Via Ocean Ports.	From the United States.	Totals.	Via Ocean Ports.	From the United States.	Totals.
Domestics—						
Women.....	6,273	701	6,974	13,284	581	13,865
Not classified—						
Men.....	2,264	1,387	3,651	1,599	1,221	2,820
Women.....	7,359	2,414	9,773	9,387	2,041	11,428
Children.....	6,078	1,696	7,774	10,473	1,311	11,784
Totals—						
Men.....	22,390	10,896	33,286	76,288	11,340	87,628
Women.....	18,611	6,145	24,756	33,483	5,280	38,763
Children.....	9,879	4,966	14,845	18,268	3,901	22,169
Totals.....	50,880	22,007	72,887	128,039	20,521	148,560
Destination—						
Maritime Provinces.....	2,368	930	3,298	7,091	849	7,940
Quebec.....	6,163	3,180	9,343	16,957	3,022	19,979
Ontario.....	24,417	6,027	30,444	58,962	6,318	65,280
Manitoba.....	4,580	1,457	6,037	20,136	1,315	21,451
Saskatchewan.....	4,413	3,773	8,186	10,053	3,147	13,200
Alberta.....	4,113	4,685	8,798	6,640	3,790	10,430
British Columbia.....	4,819	1,833	6,652	8,190	2,043	10,233
Yukon.....	7	122	129	10	37	47

Prohibited Immigration.—The following is a summary of the classes whose admission to Canada is prohibited under the existing regulations. The regulations, however, do not apply to Canadian citizens or persons having Canadian domicile:—

(1) Imbeciles, feeble-minded persons, epileptics, insane persons, persons of constitutional psychopathic inferiority, persons suffering from chronic alcoholism and those mentally defective to such a degree as to affect their ability to earn a living.

(2) Persons afflicted with tuberculosis or with any loathesome, contagious or infectious disease or a disease which may be dangerous to public health; immigrants who are dumb, blind or otherwise physically defective.

(3) Prostitutes and women and girls coming to Canada for any immoral purpose, pimps, procurers and persons who have been convicted of any crime involving moral turpitude.

(4) Professional beggars or vagrants, charity-aided immigrants and persons who are likely to become public charges.

(5) Anarchists, persons who disbelieve in or are opposed to organized government or who belong to any organization teaching disbelief in or opposition to organized government, persons who have been guilty of espionage or high treason and persons who have been deported from Canada.

(6) Persons over fifteen years of age unable to read. The literacy test, however, does not apply to a father or grandfather over fifty-five years of age, or to a wife, mother, grandmother or unmarried daughter or widowed daughter.

The Immigration Act provides for the rejection and deportation of immigrants belonging to the prohibited classes and also for the deportation of those who become undesirables within five years after legal entry.

The operation of the above regulations is illustrated in Table 6, which gives the number of immigrants rejected or deported after admission, the causes of such rejection or deportation, and the nationalities of those deported, for each of the ten fiscal years ended 1915 to 1924, together with the totals for the 22 fiscal years from 1903 to 1924.

6.—Rejections of Immigrants upon Arrival at Ocean Ports and Deportations after Admission, by Principal Causes and by Nationalities, 1903-1924.

Principal causes.	Number Rejected at Ocean Ports.											Total.
	1903-1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.	1924.	
Accompanying patients..	510	58	4	8	1	—	9	13	39	13	10	665
Alien enemies.....	—	—	—	—	—	—	—	4	5	3	—	12
Bad character.....	856	56	17	4	11	2	1	9	2	20	68	1,046
Contract labour.....	87	—	—	—	—	4	1	—	—	—	—	92
Criminality.....	68	2	4	—	1	1	3	14	6	4	11	114
Head tax.....	6	—	—	—	—	—	—	—	—	—	—	6
Lack of funds.....	2,669	452	38	55	19	10	28	255	292	24	—	3,842
Likely to become a public charge.....	1,844	71	55	55	19	27	125	236	208	119	87	2,846
Medical causes.....	4,560	319	34	30	12	19	21	99	60	37	130	5,321
Not complying with regulations.....	473	40	11	22	8	7	474	291	278	318	653	2,575
Previously rejected.....	10	—	—	—	—	—	—	—	—	—	—	10
Unskilled labour, B.C.....	—	—	—	—	—	—	—	32	193	94	33	352
Totals.....	11,083	998	163	174	71	70	662	953	1,083	632	992	16,881

Principal causes.	Number Deported after Admission.											Total.
	1903-1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.	1924.	
Accompanying patients..	155	34	5	9	39	10	18	37	48	52	78	485
Bad character.....	665	128	68	60	84	35	22	52	105	66	86	1,371
Criminality.....	1,459	404	329	277	274	236	334	586	630	543	511	5,583
Medical causes.....	2,866	379	206	98	39	70	123	133	313	282	649	5,158
Not complying with regulations.....	28	—	—	—	—	—	—	—	—	10	7	45
Public charges.....	3,568	789	635	161	91	103	158	236	950	679	775	8,145
Totals.....	8,741	1,734	1,243	605	527	454	655	1,044	2,046	1,632	2,106	20,787

Nationalities.	Number Deported after Admission.											Total.
	1903-1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.	1924.	
British.....	5,310	877	602	186	36	99	184	295	1,107	888	1,377	10,961
American.....	1,471	461	437	324	407	279	392	616	725	520	417	6,049
Other countries.....	1,960	396	204	95	84	76	79	133	214	224	312	3,777
Totals.....	8,741	1,734	1,243	605	527	454	655	1,044	2,046	1,632	2,106	20,787

Juvenile Immigration.—Among the most generally acceptable immigrant arrivals are the juveniles of both sexes, who are trained by highly accredited British organizations for Canadian life before coming to Canada, the boys being taught the lighter branches of farm work, while the girls are instructed in domestic occupations. On arrival in Canada the boys are placed on farms, while the girls are placed either in town or country, but the organizations remain the legal guardians of the children until they have reached maturity, and in addition the children are subject to efficient and recurrent Government inspection until they reach their nineteenth year. This inspection is under the control of the Supervisor of Juvenile Immigration.

The number of juveniles immigrated to Canada in each year since 1901, together with the number of applications for their services, is given in Table 7, from which it may be seen that the applications are in recent years from 10 to 15 times the number of young persons immigrated.

7.—Juvenile Immigrants and Applications for their Services, 1901-1924.

Fiscal Years.	Juvenile Immigrants.	Applications for their services.	Fiscal Years.	Juvenile Immigrants.	Applications for their services.
	No.	No.		No.	No.
1901.....	977	5,783	1913.....	2,642	33,493
1902.....	1,540	8,587	1914.....	2,318	32,417
1903.....	1,979	14,219	1915.....	1,899	30,854
1904.....	2,212	16,573	1916.....	821	31,725
1905.....	2,314	17,333	1917.....	251	28,990
1906.....	3,258	19,374	1918.....	—	17,916
1907 ¹	1,455	15,800	1919.....	—	11,718
1908.....	2,375	17,239	1920.....	155	10,235
1909.....	2,424	15,417	1921.....	1,426	19,841
1910.....	2,422	18,477	1922.....	1,211	15,371
1911.....	2,524	21,768	1923.....	1,184	17,005
1912.....	2,689	31,040	1924.....	2,080	22,193
Total.....			40,656 473,865		

NOTE.—The above are included in the total number of immigrants recorded elsewhere.

¹ Nine months.

Oriental Immigration.—The immigration to Canada of labourers belonging to the Asiatic races, able because of their low standard of living to underbid the white man in selling their labour, is fundamentally an economic rather than a racial problem, affecting most of all those portions of the country which are nearest to the East and the classes which feel their economic position threatened. A record of Oriental immigration since the commencement of the century is given in Table 8.

8.—Record of Oriental Immigration, 1901-1924.

Fiscal Years.	Chi-nese.	Japan-ese.	East Indians.	Total.	Fiscal Years.	Chi-nese.	Japan-ese.	East Indians.	Total.
	No.	No.	No.	No.		No.	No.	No.	No.
1901.....	2,544	6	—	2,550	1913.....	7,445	724	5	8,174
1902.....	3,587	—	—	3,587	1914.....	5,512	856	88	6,456
1903.....	5,329	—	—	5,329	1915.....	1,258	592	—	1,850
1904.....	4,847	—	—	4,847	1916.....	89	401	1	491
1905.....	77	354	45	476	1917.....	393	648	—	1,041
1906.....	168	1,922	387	2,477	1918.....	769	883	—	1,652
1907 ¹	291	2,042	2,124	4,457	1919.....	4,333	1,178	—	5,511
1908.....	2,234	7,601	2,623	12,458	1920.....	544	711	—	1,255
1909.....	2,106	495	6	2,607	1921.....	2,435	532	10	2,977
1910.....	2,302	271	10	2,583	1922.....	1,746	471	13	2,230
1911.....	5,320	437	5	5,762	1923.....	711	369	21	1,101
1912.....	6,581	765	3	7,349	1924.....	674	448	40	1,162
Total.....					61,295 21,706 5,381 88,382				

¹ Nine months.

Chinese Immigration.—As a result of the influx of Chinese into Canada, legislation was passed in 1885 (48-49 Vict., c. 71) providing that thereafter Chinese of the labouring class should be required as a condition of their entry into Canada to pay a head tax of \$50 each; on January 1, 1901 (62-64 Vict., c. 32), this amount was increased to \$100 and on January 1, 1904 (3 Edw. VII, c. 8) to \$500. This tax is paid by Chinese immigrants, with the exception of consular officers, merchants and clergymen and their families, tourists, men of science, students and teachers, a record showing the number of Chinese admitted who paid the tax, the number

exempt from it, and the revenue realized being given by years from 1886 in Table 9. In recent years the number of Chinese immigrants entering Canada has been much reduced, owing to the operation of Orders in Council (renewed every six months from December 8, 1913, and replaced by an Order in Council of June 9, 1919) under which the landing in British Columbia of skilled and unskilled artisans and labourers is prohibited.

9.—Record of Chinese Immigration, 1886-1924.

Fiscal Years.	Paying tax.	Exempt from tax.	Percentage of total arrivals admitted exempt from tax.	Registration for leave.	Total Revenue.
	No.	No.	p.c.	No.	\$
1886-91.....	4,590	222	4.61	7,041	239,664
1892.....	3,276	6	0.18	2,168	166,503
1893.....	2,244	14	0.62	1,277	113,491
1894.....	2,087	22	1.04	666	105,021
1895.....	1,440	22	1.50	473	72,475
1896.....	1,762	24	1.34	697	88,800
1897.....	2,447	24	0.97	768	123,119
1898.....	2,175	17	0.78	802	109,754
1899.....	4,385	17	0.39	859	220,310
1900.....	4,231	26	0.61	1,102	215,102
1901.....	2,518	26	1.02	1,204	178,704
1902.....	3,525	62	1.73	1,922	364,972
1903.....	5,245	84	1.58	2,044	526,744
1904.....	4,719	128	2.64	1,920	474,420
1905.....	8	69	89.61	2,080	6,080
1906.....	22	146	86.90	2,421	13,521
1907.....	91	200	68.73	2,594	43,094
1908.....	1,482	752	33.67	3,535	746,535
1909.....	1,411	695	33.00	3,731	713,131
1910.....	1,614	688	29.89	4,002	813,003
1911.....	4,515	806	15.13	3,956	2,262,056
1912.....	6,083	498	7.57	4,372	3,049,722
1913.....	7,078	367	4.93	3,742	3,549,242
1914.....	5,274	238	4.32	3,450	2,644,593
1915.....	1,155	103	8.19	4,373	588,124
1916.....	20	69	77.53	4,064	19,389
1917.....	272	121	30.78	3,312	140,487
1918.....	650	119	15.47	2,907	336,757
1919.....	4,066	267	6.16	3,244	2,069,669
1920.....	363	181	33.27	5,529	538,479
1921.....	885	1,550	63.66	6,807	474,332
1922.....	1,459	287	16.44	7,532	743,032
1923.....	652	59	8.30	6,682	434,557
1924.....	625	51	7.54	5,661	334,039
Totals.....	82,369	7,959	8.81	106,887	22,523,921

¹ Nine months.

The Chinese Immigration Act of 1923 (13-14 Geo. V, c. 38) restricts the entry to or landing in Canada of persons of Chinese origin or descent, irrespective of allegiance or citizenship, other than government representatives, Chinese children born in Canada, merchants (defined by what regulations the Minister of Immigration and Colonization may prescribe) and students—the last two classes to possess passports issued by the Government of China and endorsed by a Canadian immigration officer.

Japanese Immigration.—Japanese immigration to Canada was comparatively negligible prior to the Russo-Japanese war of 1904-5, but thereafter assumed considerable proportions, no fewer than 7,601 Japanese immigrants entering Canada, largely from Hawaii, in the fiscal year ended March 31, 1908, and settling mainly in British Columbia. In that year an agreement was made with the Japanese

Government under which the latter undertook to limit the number of passports issued to Japanese emigrating to Canada, while the Canadian Government agreed to admit those possessing such passports, while prohibiting others from entering. The statistics of Table 8 show that in this way Japanese immigration has been effectively limited.

East Indian Immigration.—East Indian immigration to Canada, like Japanese, is shown by the statistics of Table 8 to have been negligible down to 1907, when no fewer than 2,124 East Indian immigrants arrived. However, as a consequence of the operation of section 38 of the Immigration Act of 1910, East Indian immigration has since that date been comparatively small. A resolution of the Imperial War Conference of 1918 declared that "it is the inherent function of the Governments of the several communities of the British Commonwealth that each should enjoy complete control of the composition of its own population by means of restriction on immigration from any of the other communities." However, it was recommended that East Indians already permanently domiciled in other British colonies should be allowed to bring in their wives and minor children, a recommendation which was implemented, so far as Canada was concerned, by Order in Council of March 26, 1919. However, in the fiscal years ended March 31, 1921, 1922, 1923 and 1924, only 10, 13, 21 and 40 East Indian immigrants respectively were admitted.

Expenditure on Immigration.—The sums expended by the Dominion Government on immigration in each of the fiscal years ended 1868 to 1924 inclusive, as stated in the Public Accounts issued annually by the Department of Finance, are shown in Table 10.

10.—Expenditure on Immigration in the fiscal years 1868-1924.

(Compiled from the Public Accounts.)

Years	\$	Years	\$	Years	\$	Years	\$
1868.....	36,050	1883.....	373,958	1898.....	261,195	1912.....	1,365,000
1869.....	26,952	1884.....	511,209	1899.....	255,879	1913.....	1,427,112
1870.....	55,966	1885.....	423,861	1900.....	434,563	1914.....	1,893,298
1871.....	54,004	1886.....	257,355	1901.....	444,730	1915.....	1,658,182
1872.....	109,954	1887.....	341,236	1902.....	494,842	1916.....	1,307,480
1873.....	265,718	1888.....	244,789	1903.....	642,914	1917.....	1,181,991
1874.....	291,297	1889.....	202,499	1904.....	744,788	1918.....	1,211,954
1875.....	278,777	1890.....	110,092	1905.....	972,357	1919.....	1,112,079
1876.....	338,179	1891.....	181,045	1906.....	842,668	1920.....	1,388,185
1877.....	309,353	1892.....	177,605	1907.....	611,201	1921.....	1,688,961
1878.....	154,351	1893.....	180,677	1908.....	1,074,697	1922.....	2,052,371
1879.....	186,403	1894.....	202,235	1909.....	979,326	1923.....	1,987,745
1880.....	161,213	1895.....	195,653	1910.....	960,676	1924.....	2,417,374
1881.....	214,251	1896.....	120,199	1911.....	1,079,130		
1882.....	215,339	1897.....	127,438			Total.....	36,838,356

¹ Nine months.

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2.—Immigration Policy.

The crest of the wave of immigration into Canada occurred in the years preceding the Great War, when the total immigration ran as high as 402,432 in the fiscal year ended Mar. 31, 1913. This movement was largely due to the policy of giving free government lands to those who would engage to live upon them and perform certain residence and development duties. The homestead entries for the period of the fiscal years 1901 to 1914, inclusive, numbered 434,862, and represented the enormous area of more than seventy million acres of fertile land in the provinces of Manitoba, Saskatchewan, Alberta and certain portions of British Columbia, granted free to settlers as an inducement toward the development of the country.

The war interrupted the flow of immigration, and with the return of peace new conditions called for new policies. First and most pressing of these was the problem of re-absorbing into civil life the hundreds of thousands of returning soldiers. The realization that Canada had been somewhat optimistic in its railway undertakings had also been borne in upon the public, and immigration policies had to be so shaped as to avoid the necessity at any early date of further railway construction on a large scale. This meant that free government lands, of which millions of acres were still available, but mostly in districts remote from railway services, ceased to be a magnet. With the ordinary channels of employment filled with returning soldiers, and free government lands located at such distances from railways that settlement upon them could not be generally encouraged, the Department of Immigration and Colonization found it necessary to restrict its activities almost exclusively to those who were in a position to buy land, or were prepared to take farm employment, and to household workers. This strictly selective policy, combined with certain restrictive regulations which were a natural aftermath of the war and other conditions such as the high cost of transportation and the depreciation of European currencies, resulted in a relatively small movement of immigrants to Canada in comparison with the great numbers admitted during the years from 1910 to 1914.

During 1923, on account of the return of prosperity and the absorption of surplus labour, it became increasingly evident that popular opinion in Canada favoured a resumption of immigration activities on a considerable scale. The Government announced its intention of encouraging the migration of the largest possible number of those classes of settlers which Canada could absorb. This policy was embodied in a statement made by the Hon. J. A. Robb, shortly after his appointment as Minister of Immigration and Colonization, and elicited favourable comment in the British press, which welcomed a resumption of Canadian immigration activities. While, as the Minister pointed out, there are would-be immigrants into Canada who are not suited for the Dominion owing to physical, moral or industrial unfitness or because they belong to races that cannot be assimilated without social or economic loss to Canada, there are in Great Britain and Continental Europe tens of thousands of skilled workers and unskilled workers (not agriculturists) who would be an asset to Canada if steady employment could be found for them.

Recognition of the fact that there are many families in Great Britain and Ireland who would make good settlers in Canada but are hampered by lack of money resulted in an arrangement being entered into with the British Government under which assistance in bearing the transportation expenses of selected immigrants by means of a loan in the case of adults, and an outright grant in the case of children, was provided. The arrangement covers assistance to three types of British immigrants, namely, children, nominated persons and household workers. The amount

of such assistance is limited, in the case of children who have not reached their seventeenth birthday, to a grant not exceeding their transportation to destination in Canada. Assistance may be given to "nominated persons" in the form of a loan, repayable without interest, not exceeding the total cost of transportation at lowest third-class rate from the port of embarkation in the United Kingdom to the rail destination in Canada. Similar assistance in the form of a loan is provided for household workers, with the additional provision that, at the end of twelve months from date of arrival in Canada, a refund of £6 shall be made to each female household worker who has remained for that period on a farm in Canada and who has meanwhile satisfactorily paid the instalments on her loan.

Persons may be nominated for assistance under the nominated passage scheme by British subjects already resident in Canada, by the Dominion Government or any of its agents, or by any provincial government in Canada or its agents.

Loans made to single men and women are repayable in quarterly instalments and must be repaid within one year from landing in Canada. Loans made to married men are repayable in semi-annual instalments and must be completely repaid within three years of arrival in Canada. Only persons who have been approved by officials of the Dominion Government and Imperial Government are eligible for assistance, either by loan or grant.

To promote the better functioning of colonization activities in Canada and the proper reception of new settlers, the machinery of the Soldier Settlement Board is now utilized as the Land Settlement Branch of the Department of Immigration and Colonization. It is the function of this Branch to see that new settlers are directed to lands where they can have the best opportunities of success and to safeguard them from exploitation in the purchase price of their farms. The Land Settlement Branch is assisted, in each of its districts, by advisory settlement boards, composed of outstanding mortgage and loan men and agriculturists, who pass on the suitability of land and the fairness of the purchase price of all privately owned lands listed with the Branch. The settlement of family units and of groups of former acquaintances or kinsfolk is particularly encouraged.

Still more recently, provision has been made by arrangement with the British Government for assisting selected British families to locate on farms in Canada, in addition to the passage assistance already outlined. This assistance is advanced by the British Government up to a maximum of £300 per family, repayable over a period of twenty-five years with interest at five p.c. per annum. The families must be personally selected, must be approved by both British and Canadian authorities, and must have demonstrated their ability to operate a farm. Settlement is made under the direction of the Land Settlement Branch on farms owned by the Government or acquired for that purpose. Payment of the purchase price of the farm is extended over twenty-five years with interest at five p.c. per annum.

Recent Emigration from Canada—An important factor tending to offset our immigration activities was a movement from Canada to the United States which attained considerable proportions at certain periods during recent years. The quota system of immigration regulation, applied by the United States Government against European immigrants, but not against Canadians, had the effect of limiting immigration to the United States and as a consequence offering especially attractive inducements to Canadians to enter the United States during the period of that

country's recent industrial prosperity. No record of this movement has ever been kept by the Canadian Department, and, while the seriousness of the movement was recognized, its magnitude, as indicated by the United States returns, is sharply questioned on the ground that these returns do not make allowance for Canadians returning to Canada after a more or less extended period of residence in the United States. The Canadian Department was convinced that a very considerable return movement was taking place, but until March, 1924, no attempt was made to ascertain the exact magnitude of that movement. In that month, however, immigration officers were instructed to take note of Canadians returning to Canada from the United States after an absence in that country of more than six months. The figures for the first seven months for which statistics are available show a total return to Canada during that period of 30,966, as detailed in the table hereunder. It is expected that this rate will be maintained and that the total return movement of Canadians to Canada in the first year for which a record of such a movement is kept will not fall short of 50,000 persons. Another circumstance which has in the past indicated a considerable movement from Canada to the United States has no doubt been the practice of many Europeans entering Canada, apparently as *bona fide* immigrants, but really with the intention of entering the United States as soon as the quota restrictions will permit them to do so. The recent tightening up of the American regulations concerning persons from Canada entering the United States and the active co-operation of the Canadian Department of Immigration and Colonization in discouraging this traffic seem likely to reduce a movement which is already, for industrial and other reasons, distinctly on the wane.

Table 11 shows the number of Canadians returning from the United States during the seven months ended Oct. 31, 1924.

11.—Report of Canadians Returning from the United States during the Seven Months ended October 31, 1924.

Months.	Canadian born Citizens.	British Subjects who had acquired Canadian Domicile.	Naturalized Canadian Citizens.	Totals.
April.....	3,608	289	190	4,087
May.....	4,170	505	261	4,936
June.....	3,962	447	311	4,720
July.....	4,426	405	296	5,127
August.....	4,023	552	416	4,991
September.....	2,952	434	239	3,625
October.....	2,844	394	242	3,480
Totals.....	25,985	3,026	1,955	30,966

VII.—PRODUCTION.

This section includes a general survey of production, followed by statistics of agriculture, the fur trade, forestry, fisheries, minerals, water powers, manufactures and construction.

The term "production" is used in this connection in its popular acceptance, *i.e.*, as including such processes as the growing of crops, extraction of minerals, capture of fish, conversion of water power into electrical current, manufacturing, etc.,—in economic phrase, the creation of "form utilities." It does not include various activities which are no less "productive" in a broad and strictly economic sense, such as (a) transportation, refrigeration merchandising, etc., which add to commodities already worked up into form the further utilities of "place", "time" and "possession", and (b) personal and professional services, such as those of the teacher and doctor, which are not concerned with commodities at all, but are nevertheless useful to a civilized society—representing, in economic language, the creation of "service utilities".

As showing the importance of these latter activities, it may be pointed out, for comparison with the figures in the accompanying tables, that railway gross earnings in 1923 amounted to \$478,328,047, street railway gross earnings to \$50,191,387, and telephone and telegraph earnings to \$53,550,243, all of which from a broad point of view may be considered as "production". It may be further noted that of 2,723,634 persons ten years of age and over employed in 1911 in gainful occupations in Canada, 217,544 were engaged in transportation, 283,087 in trade and merchandising, 411,232 in domestic, personal and professional service, and civil and municipal government,—a total of 911,863 or one-third of the whole. In other words, only about two-thirds of usefully and gainfully employed persons are engaged in "production" according to the definition adopted in the present statement. We might therefore add one half to the present total as a rough estimate of the value in dollars of the total productive activity of the Canadian people according to the economist's definition of production, which approximates to the concept of national income.

I.—GENERAL SURVEY OF PRODUCTION.

There is frequent demand in Canada for a survey of production that will differentiate the more important branches and at the same time give a purview of the whole which will be free from overlapping. This is somewhat difficult to accomplish with clearness, in view of the varying definitions that attach to industrial groups from different points of view. For example, brick, tile and cement are frequently included in "mineral production" as being the first finished products of commercial value resulting from the production process; frequently, however, they are regarded as "manufactures" in view of the nature of the production process,—either allocation being correct according to the point of view.

The accompanying tables show the total value of all commodities produced in Canada during 1920 and 1921, the values being as in the producers' hands.

"Gross" and "Net" Production.—The values of products are shown under two headings, namely, "gross" and "net". "Gross" production shows the total value of all the individual commodities produced under a particular heading. "Net" production represents an attempt to eliminate the value of materials consumed in

the production process. For purposes of ordinary economic discussion, the net figures should be used in preference to the gross, because of the large amount of duplication which the latter includes on account of the necessity of making the individual items self-contained.

Interpretation of Items.—The primary industries of agriculture, fishing, forestry, mining, etc., are separated in this statement from the secondary or manufacturing processes. The close association between the two and the overlappings that are apt to occur have already been pointed out. As further explaining the procedure that has been followed in drawing up the tables the following notes are appended:—

AGRICULTURE.—Dairy factories are included under this heading; farm dairy products (gross) include the milk consumed whole and sold to dairy factories, and butter, etc., made on the farm.

FORESTRY.—Forestry production is understood to consist of the operations in the woods as well as those of saw mills and pulp-mills, the latter being limited to the making of first products such as lumber, lath, shingles, pulp and cooper-age stock.

FUR PRODUCTION.—The item of fur production is limited to wild life production. To obtain a total of the peltries produced in Canada, it would be necessary to add to the wild life output the production of pelts on fur farms.

MINERAL PRODUCTION.—Under mineral production all items are included that might be allocated to "manufactures". Considerable overlapping exists as between "mineral production" on the one hand and "manufactures" on the other. The Bureau presents the detailed statistics of these groups (the chief of which are smelters, brick, cement, lime, etc.) in its reports on mineral production, since their product is the first to which a commercial value is ordinarily assigned.

TOTAL MANUFACTURES.—The figure given for the heading is a comprehensive one, including the several items listed with the extractive industries above, though also frequently regarded as "manufactures", *viz.*, dairy factories, fish canning and curing, saw-mills, pulp-mills, shipbuilding and certain mineral industries. This duplication is eliminated from the grand total as well as from "manufactures, *n.e.s.*" listed in Table 3.

MANUFACTURES, *N.E.S.*—The figures given for manufactures, *n.e.s.*, are exclusive of the value of the products of all manufacturing processes closely associated with the extractive industries that are frequently included under this heading; hence it is obvious that the grand total is equivalent to an amount obtained by adding the values for manufactures, *n.e.s.*, and for the other eight divisions.

Total Net Value of Production.—Approximately two-thirds of the gainfully employed persons in the Dominion produced in 1922 goods having a net value of \$2,951,000,000. This amount compares with a net production of \$2,815,000,000 in 1921 and \$3,745,000,000 in 1920. "Net" production represents the value left in the producers' hands after the elimination of the value of the materials consumed in the production process, such as seed in the case of field crops and food in the case of farm animals.

Importance of the Several Branches of Production.—Agriculture, which had yielded precedence to manufactures in the two preceding years, moved into first place in 1922 as the chief wealth producing industry in Canada, the net out-

put of agriculture being \$1,149,000,000 as compared with a total of \$1,131,000,000 for manufactures. The ratio of agriculture to the grand total of net production was 38.9 p.c. This figure may be compared with 38.3 p.c. for manufactures, including the net value of the products made by manufacturing establishments closely associated with the primary industries. The corresponding ratios for the preceding year were 38.8 p.c. for agriculture and 40.9 p.c. for manufactures.

Of the remaining branches, forestry in 1922 occupied third place, contributing \$266,000,000 or 9 p.c. of total net output. Construction is credited with \$220,000,000 or 7.5 p.c. and mining with \$177,000,000 or 6 p.c. Other industries, each credited with less than 3 p.c. of the national production, were the generation of electric power, custom and repair work, fisheries and trapping.

Production in the Provinces.—The leading position of Ontario in production, with 39.3 p.c. of the total output, was distinctly marked. Quebec held second place with 24.7 p.c., and the three western provinces of Saskatchewan, British Columbia and Alberta followed with percentages of 10.6, 7.0 and 5.5 respectively; Manitoba contributed 5.4 p.c. and the Maritime Provinces and the Yukon 7.5 p.c.

Industrial Activities in the Provinces.—Agriculture, including fur farming, contributed 78.5 p.c. of the net output of Prince Edward Island. Nova Scotia was dependent chiefly on agriculture, manufacturing and mining which were respectively responsible for 35.2 p.c., 24.0 p.c. and 22.4 p.c. of the output. The contribution of manufactures, aside from processes carried on in connection with the extractive industries, was 17.8 p.c. Farming was the chief industry of New Brunswick, and total manufactures and lumbering competed for second place, with contributions of 29.3 p.c. and 29 p.c. respectively. Manufactures, *n.e.s.*, furnished an output of 16.2 p.c. of the total. Comparing the results in 1922 with the preceding year, the net production of Nova Scotia and Prince Edward Island declined, while that of New Brunswick increased from \$85,977,000 to \$86,763,000. In Nova Scotia the value of the fisheries, trapping and the generation of electric power increased, while the remaining branches declined. All branches, with the exception of agriculture, were more productive in New Brunswick.

The income derived from manufacturing in Quebec was greater than that from any other industry; aside from the output of establishments associated with the extractive industries, it was equivalent to 40.9 p.c., while the net output of the entire manufacturing process was 47.8 p.c. Farming held second place with a production of 29.3 p.c. and forestry, with an output of 12.7 p.c., occupied third place. The net output of Quebec was \$728,000,000 in 1922, compared with \$735,000,000 in the preceding year. The chief change was the decline of about \$45,000,000 in net agricultural output. Returns from manufacturing, mining and construction were considerably greater during the later year, and the income from the lumber industry was well maintained.

The net revenue from manufacturing in Ontario was in excess of \$592,000,000, as compared with \$323,000,000 from agriculture. Construction held third place, with a contribution of 7.5 p.c., and forestry followed with 6.8 p.c. The mining output constituted 5 p.c. of the total net production. The income from custom and repair work and that from the generation of electric power were also important, with 4.3 p.c. and 3.5 p.c. respectively. Production increased from \$1,116,000,000 in 1921 to \$1,160,000,000 in 1922, due mainly to construction and mining operations, which increased their outputs by \$33,000,000 and \$11,000,000 respectively. Except in forestry and in fisheries, Ontario led the other provinces in the productiveness

of the main branches of industry. The province yielded precedence in forestry operations to Quebec alone, while British Columbia, Nova Scotia and New Brunswick obtained a greater income from the fisheries. More than 52 p.c. of the net manufacturing output of the Dominion and 28 p.c. of its agricultural income was contributed by Ontario.

More than 91 p.c. of the output of Saskatchewan was obtained from farming, which also largely predominated as a producer of new wealth in Manitoba and Alberta, with proportions of 64.9 p.c. and 62.2 p.c. respectively. Manufacturing held second place in Manitoba and mining in Alberta. The mineral production of Alberta, consisting chiefly of coal, formed 17.3 p.c. of the net output of the province. Increased yields of wheat accounted in large measure for the increase in the net output of the Prairie Provinces during 1922 over the preceding year. The gain of Saskatchewan was about \$79,000,000, while Manitoba gained \$18,000,000 and Alberta \$7,000,000.

The net income from manufacturing in British Columbia during 1922 was in excess of \$63,000,000, but more than half of this amount was derived from manufacturing processes closely associated with the primary industries, especially logging and fishing. The remainder, of nearly \$29,000,000, was 13.8 p.c. of the net output of the province. The lumbering industry provided the chief source of new wealth, about 25 p.c. of the net income of the province, while mining and farming followed in order with percentages of 19.0 and 17.3 respectively. The net output of British Columbia during 1922 was about \$9,000,000 greater than the production of the preceding year. The income from mining increased from \$33,000,000 to \$39,000,000; in forestry the advance was from \$50,000,000 to \$52,000,000, while the net value of construction contracts increased from \$17,908,000 to \$18,738,000. Agriculture and manufacturing showed slight decreases.

1.—Summary by Industries of the Value of Production in Canada, 1921 and 1922.

Division of Industry.	1921.		1922.	
	Gross.	Net.	Gross.	Net.
	\$	\$	\$	\$
Agriculture.....	1,485,109,796	1,092,422,570	1,496,680,534	1,148,693,525
Forestry.....	348,032,597	263,235,712	361,848,588	266,406,716
Fisheries.....	43,456,342	34,931,935	53,425,936	41,800,210
Trapping.....	9,527,029	9,527,029	16,889,403	16,889,403
Mining.....	171,923,342	162,926,722	184,297,242	177,031,503
Electric power.....	73,376,580	73,376,580	82,328,866	82,328,866
Total primary production.....	2,131,425,686	1,636,420,548	2,195,470,569	1,733,150,223
Construction.....	259,641,859	169,048,630	339,389,954	220,460,235
Custom and repair.....	89,108,737	57,956,112	90,837,351	58,053,266
Manufactures ¹	2,534,315,435	1,150,217,869	2,420,349,227 ²	1,130,866,629
Total secondary production ¹	2,883,066,031	1,377,222,611	2,850,576,532	1,409,380,130
Grand Total.....	4,626,589,036	2,814,996,678	4,661,497,767	2,950,574,884

¹ The item "manufactures" includes dairy factories, saw-mills, pulp-mills, fish canning and curing, shipbuilding and certain mineral industries, which are also included in other headings above. This duplication amounting in 1921 to a gross of \$387,902,681 and a net of \$198,646,481 and in 1922 to a gross of \$384,549,334 and a net of \$191,955,469, is eliminated from the grand total.

² The gross value of manufactured products in 1922, as given in the manufactures section of the present volume, was \$2,439,843,766. The total for central electric stations, \$82,328,866, included here under "primary production," has been deducted, while the output of the shipbuilding industry, \$7,546,154, also included here under "gross construction," and of certain mineral industries amounting to \$55,288,173, and also included here in the gross total for "mining," was added. In this manner a gross value for "manufactures" of \$2,420,349,227 was derived as one of the chief components of national production.

2.—Summary by Provinces of the Value of Production in Canada, 1921 and 1922.

Provinces.	1921.		Percent- ages of Total Net Value.	1922.		Percent- ages of Total Net Value.
	Gross Value.	Net Value.		Gross Value.	Net Value.	
	\$	\$		\$	\$	
P. E. Island.....	24,473,385	18,910,655	0.67	22,718,952	17,237,174	0.6
Nova Scotia.....	179,975,189	130,279,898	4.63	261,737,077	115,732,903	3.9
New Brunswick....	125,497,104	85,997,215	3.05	131,730,097	86,762,551	2.9
Quebec.....	1,219,383,026	735,445,514	26.16	1,166,185,595	728,398,718	24.7
Ontario.....	2,016,362,396	1,115,962,193	39.64	2,032,286,270	1,159,614,460	39.3
Manitoba.....	232,239,386	139,818,719	4.96	236,669,001	158,179,242	5.4
Saskatchewan.....	306,409,889	232,036,948	8.24	375,361,370	311,357,481	10.6
Alberta.....	223,648,964	154,376,861	5.48	221,929,388	161,317,220	5.5
British Columbia...	295,309,552	198,941,272	7.06	308,793,632	207,939,545	7.0
Yukon.....	3,290,145	3,227,403	0.11	4,086,385	4,035,590	0.1
Grand Total...	4,626,589,036	2,814,996,678	100.00	4,661,497,767	2,950,574,884	100.0

3.—Percentages of the Value of the Net Production in each Industry to the Total Net Output in each Province, 1922.

Industry.	Prince Edward Island.	Nova Scotia.	New Brun- swick.	Quebec.	Ontario.
Agriculture.....	78.5	35.2	40.0	29.3	27.8
Forestry.....	4.2	8.2	29.0	12.7	6.8
Fisheries.....	9.4	8.8	5.4	.3	.2
Trapping.....	.6	.1	.1	.5	.4
Mining.....	—	22.4	2.6	2.4	5.0
Electric power.....	.7	1.9	1.6	3.0	3.5
Construction.....	1.7	3.9	3.7	9.4	7.5
Repair work.....	.8	1.7	1.4	1.5	4.3
Manufactures, n.e.s.....	4.1	17.8	16.2	40.9	44.5
Grand Total.....	100.0	100.0	100.0	100.0	100.0
Total manufactures (percentage to grand total of net production).....	9.7	24.0	29.3	47.8	51.1

Industry.	Manitoba.	Sas- katohe- wan.	Alberta.	British Colum- bia.	Yukon.	Canada.
Agriculture.....	64.9	91.4	62.2	17.3	—	38.9
Forestry.....	2.1	.7	1.8	25.0	—	9.0
Fisheries.....	.6	.1	.2	9.1	.3	1.4
Trapping.....	1.1	.5	.9	.8	50.2 ¹	.6
Mining.....	1.4	.4	17.3	19.0	44.2	6.0
Electric power.....	2.1	.9	1.9	3.6	2.9	2.8
Construction.....	3.9	1.4	3.6	9.0	1.9	7.5
Repair work.....	2.8	1.2	2.4	2.4	.5	2.0
Manufactures, n.e.s.....	21.1	3.8	9.7	13.8	—	31.8
Grand Total.....	100.0	100.0	100.0	100.0	100.0	100.0
Total manufactures (percentage to grand total of net production).....	24.0	4.4	12.2	30.6	1.9	38.3

¹ Includes the trapping industry of the Northwest Territories.

II.—AGRICULTURE.

Agriculture, taken as including stock raising and horticulture, is the chief industry of the Canadian people, employing in 1911 34·3 p.c. of the total gainfully occupied population. In addition it provides the raw material for many Canadian manufactures, and its products constitute a very large percentage of Canadian exports. It is therefore treated here in considerable detail.

The sub-section begins with an account of the "Development of Agriculture in Canada." Thereafter is found a statement of current Government activities in connection with the promotion of agriculture, including those of the Dominion and Provincial Experimental Stations. Then come statistics of agriculture, including agricultural revenue and wealth, field crops, farm live stock and poultry, fur farming, dairying, fruit, special crops, farm labour and wages, prices and miscellaneous, and since Canadian exports of agricultural commodities are sold in the world market, the sub-section closes with a review of the world's statistics of agriculture, compiled from the publications of the International Institute of Agriculture.

1.—Development of Agriculture in Canada¹.

In the whole area now constituting Canada, the first settlement, and at the same time the first effort at agricultural production made by white men, was most probably that begun at Port Royal, now Annapolis, Nova Scotia, by the French under de Monts in 1605. Here some of the settlers cultivated patches of land and grew maize, pumpkins and beans, while cows were brought here by Poutrincourt in 1606. The Indians also grew maize to a small extent to supplement food obtained by hunting. According to the census of 1671, the Acadians, then numbering 441, had 429 arpents² under cultivation, together with 866 cattle, 407 sheep and 36 goats. Afterwards the settlers continued to clear the lands and reclaim the fertile marshes from the sea, chiefly along the Basin of Minas, on which hay grew abundantly.

In the valley of the St. Lawrence, farming on a small scale appears to have been carried on by Champlain, the founder of Quebec, as early as 1608, when cattle were imported and hay and fodder grown, together with wheat and other grains. In 1626 Champlain established a farm at Cap Tourmente for cattle which he sent from Quebec.

The first real farmer, however, was Louis Hébert, who landed in Quebec in 1617, and immediately began to clear and cultivate the soil on what is now part of Upper Town, Quebec. His only tool was a spade, but he worked away till the soil was ready to receive the seed, and also planted some apple trees. Hébert was followed by other farmers, among them Guillaume Couillard, Abraham Martin and Robert Giffard, the last of whom was said to have had in 1635 large crops of wheat, peas and Indian corn. In the district of Three Rivers, Pierre Boucher had large crops of grains and vegetables, and in 1648 Pierre Gadbois and others commenced farming on land where now stands the city of Montreal.

The land was held under seigneurial or feudal tenure, similar to that prevailing in old France, a system which seems to have promoted the development of agriculture. Many former hunters and traders settled down as cultivators of the soil, and came to be known as "habitants."

¹ Abridgment and revision of the article by Dr. Grisdale, published in the Year Book for 1921, p. 202.

² Arpent, the ancient French square measure for land, is equal to 0·845 of the English standard acre as used in Canada

In 1667 there were 11,448 arpents of land under cultivation, while the farmers owned 3,107 cattle and 85 sheep. More live stock of all kinds was gradually brought into the country. A census of 1721 gives the following statistics: arpents under cultivation, 62,145; in pasture, 12,203; grain harvested—wheat, 282,700 bushels; barley, 4,585 bushels; oats, 64,035 bushels; peas, 57,400 bushels; corn, 7,205 bushels; flax, 54,650 lb.; hemp, 2,100 lb.; tobacco, 48,038 lb. There were at this time 5,603 horses, 23,288 cattle, 13,823 sheep and 16,250 swine in the colony.

The period following the English conquest of Quebec, 1760 to 1850, was a critical one for agriculture, the governing classes being too much engrossed in politics to pay much attention to it. However, the settlement of the Eastern Townships was begun in 1774 by the United Empire Loyalists, who brought their cattle with them. These settlers were granted lands which were held under the tenure known as "free and common soccage." These settlements made good progress and were reinforced later on by French-Canadians from the seigneuries.

Agriculture in the Provinces before Confederation.

Prince Edward Island.—The first record of settlement in Prince Edward Island, or St. John Island, as it was then called, was in 1713, when some families of Acadians migrated to its shores, bringing a few cattle with them. In 1763 the island was ceded to Great Britain, divided, and granted to persons who had claims on the ground of military service, but practically no attempt was made to cultivate the land. However, farming received a slight impetus on the arrival in 1783 of the United Empire Loyalists, who brought their cattle with them and began to cultivate the land. The country was undulating and the soil was found to be a bright red loam, very suitable for the growing of cereal crops and potatoes. Rich deposits of mussel mud were found, which were used as fertilizer with good results. Soon Prince Edward Island oats and potatoes were listed on the markets of the Maritime Provinces.

Nova Scotia.—While the territory which is now Nova Scotia became a British possession by the Treaty of Utrecht in 1713, the first English-speaking settlement was made in Halifax in 1749, and for military rather than economic purposes. However, between 1751 and 1753, about 1,600 German and Swiss immigrants had settled in what is now the county of Lunenburg. Further, after the expulsion of the Acadians from Port Royal in 1755, a considerable number of New Englanders had settled in the Annapolis Valley. As early as 1762, 14,340 acres were under cultivation, producing hay, grain and potatoes and supporting some live stock. In 1783, after the Peace of Paris, many United Empire Loyalists came to Nova Scotia, bringing their live stock with them. They received from the British Government grants of land, agricultural implements and seed corn.

In the Atlantic Provinces generally, the farmers were unprogressive, and farming was at a rather low ebb when, in 1818, a series of letters published in the Acadian Recorder under the signature of "Agricola," attracted public attention. These letters dealt with all phases of the industry. The people were awakened from their lethargy, and the outcome was the formation at the end of 1818, of the Central Agricultural Society, of which "Agricola," now found to be John Young, a Scotsman who had come to Nova Scotia a few years previously, became secretary. Twenty-five other agricultural societies were organized within the next two years. Yearly exhibitions were held, improved stock and seed were distributed and conditions improved generally.

New Brunswick.—As early as 1605 French adventurers, ascending the St. John river, noticed fields of Indian corn on the flats along its shores; but the first settlement was made by some fifty Acadians, with a few cattle, near that river in 1693. When Acadia was ceded to Great Britain in 1713, others moved north from the peninsula of Nova Scotia into New Brunswick, settled in the valleys and devoted themselves to growing corn and hay. The land was very fertile and produced abundant crops. About 1762 a number of Massachusetts colonists formed a settlement at a place now called Maugerville; others took the alluvial lands between there and the Jemseg river. In 1784, when a large part of the land belonging to the Acadians was seized by the British and given to the United Empire Loyalists, the Acadians moved to the northern part of the province and founded the flourishing settlement of Madawaska. The rich soil along the St. John river, when only cleared of the trees and harrowed, produced 20 bushels of corn and 20 bushels of wheat per acre and when properly worked gave much better yields. In 1788 seventy acres of land were sold for £42 3s. 6d., but in the early years of the nineteenth century land rose rapidly in value. Large quantities of hay, roots and vegetables of all kinds, as well as beef and mutton, were marketed at St. John.

Quebec.—During two centuries and a half the habitant varied his system of farming very little. When the land was cleared of trees, wheat and oats were sown among the stumps. Two crops of this nature were harvested and then hay and other grasses were grown for several years. When the stumps were sufficiently rotten, the land was ploughed. Half the land was ploughed in three consecutive years and seeded to cereals and roots; the other half was kept for the production of hay as pasture for live stock. This was alternated during the next three years, and so on. The quantity of live stock kept was small compared with the area of the farm. This was not a very scientific system, but the soil was so rich that the crops of grain, roots and hay were always plentiful, so much so that flour, wheat and peas were being exported in 1749. Butter and cheese were always made, while maple sugar has been one of the regular products since 1690, and potatoes were first grown in 1758.

Ontario.—Agriculture in Ontario may be said to have begun in 1671, when Frontenac founded the first settlement near Kingston. He was granted a vast territory on the understanding that he would foster agriculture and stock raising; but little agricultural work was actually done, as all of the settlers' time was taken up in warring with the Indians. In 1701, a small settlement on the Detroit river was started by La Motte Cadillac, who is said to have brought some cows with him.

The first English-speaking agricultural settlement was not commenced until 1783, when the United Empire Loyalists arrived from the United States. They settled principally around Niagara, York, now Toronto, and the bay of Quinte, the settlements along the bay of Quinte and the St. Lawrence river being among the most populous. Townships were surveyed and grants of land given. As these exiled settlers were very poor owing to the confiscation of their property, they had to be provided with rations, clothes, implements, seed grain, etc. A cow was allotted to every two families and other articles were divided among them. The implements supplied them were very crude, but by combining their efforts they were able to clear open spaces in the forests, build rude huts and sow the seed among the stumps. The crops of wheat, corn, etc., grown on this virgin soil gave excellent yields for the first three years, but the crop of 1788 was a failure. During these years, flour mills were built at Catarqui river, Napanee, Matilda, Niagara Falls, Fort Erie and Grand river. The pioneers had many hardships to contend with, not the least being

the depredations of the Indians and wild beasts. Later, during the Crimean war, the price of wheat rose from 30 cents to \$2 per bushel, which, followed by the high prices obtaining during the American Civil War, gave many of the farmers their first real start, enabling them to bring in cattle, horses and sheep from Lower Canada and the United States.

The building of roads, under an Act of 1793, opened up the country, and soon grain, especially corn, was being exported. Cheese and butter were made, and a market was opened at Kingston in 1801. Wheat was the leading cereal produced, the valley of the Thames being noted for the quantity and quality of this grain. After the war of 1812, grants of 100 acres with provisions and implements were made to the soldiers. Legislation was passed to encourage the growing of hemp, but little success was obtained in the handling of this crop. According to the census of 1817, the Midland districts of Ontario contained 3,600 horses, 100 oxen, 6,185 cows and 1,654 young cattle.

Northwest Territories.—The earliest attempts at cultivation in the West date from the arrival of the Selkirk settlers at the Red river in 1812. The twenty-two men who composed the settlement immediately commenced to break the land, which was sown with winter wheat. The wheat crops of 1813 and 1814 were complete failures, owing both to lack of knowledge and to the fact that the only implement available for breaking the sod was the hoe. The yield of potatoes and turnips was, however, good, and the crop of 1815 was a success.

During the first few years of the settlement, there was great rivalry between the North-West Company and the Hudson's Bay Company, which ended in bloodshed in 1816. Many of the settlers were killed and the remainder fled up lake Winnipeg to Jack river. Early in 1817 a relief force was sent by Lord Selkirk, fort Douglas was recaptured and the settlers were persuaded to return and resume farming. Misfortune, however, seemed to follow the efforts of this colony, its crops being wiped out by grasshoppers in 1818 and 1819. As the supply of seed was exhausted, some of the settlers went south to Wisconsin and, after much hard labour, returned with 250 bushels of seed. Small crops followed, and the people were only saved from suffering and want by the generosity of Lord Selkirk.

In 1822 the population was 681 and the numbers of live stock were: horses, 78; oxen, 6; cattle, 48; calves, 39; sheep, 10; pigs, 12. The quantities of seed sown were in bushels: wheat, 235; barley, 142; corn, 12; potatoes, 570. The first satisfactory crop of grain was reaped in 1824, wheat yielding 44 bushels from the plough and 68 bushels after the hoe. It was gathered with the sickle and threshed with the flail. The crops varied during succeeding years, but by 1830 the colony was in a flourishing condition.

In the territories now known as the provinces of Saskatchewan and Alberta the agriculture of early days was limited to the trading posts of the Hudson's Bay Company. About these posts settlers grew vegetables, wheat, barley and oats.

British Columbia.—Daniel Williams Harmon was the first farmer in British Columbia, settling in the Fraser Lake district. Entries in his diary show that in 1811, 1815 and other years, he planted potatoes, vegetables and barley and that the yields were large, one bushel of potatoes producing forty-one, and five quarts of barley sown yielding five bushels. For many years fine crops were grown in this district and at the posts of the Hudson's Bay Company, which, together with the North-West Company, was the pioneer in agriculture in British Columbia. In 1837 the Hudson's Bay Company had a large farm near fort Vancouver, producing grain, vegetables and other crops and carrying all kinds of live stock. They had large farms

at Nisqually and Cowlitz and smaller ones on Vancouver island, Dr. John McLoughlin being one of the great promoters of agriculture. With the gold rush to the Cariboo in the 50's, and the springing up of mining camps, an impetus was given to farming. This was the beginning of stock raising in the valleys of the Thompson and Nicola. Later many of the miners turned to farming and stock raising.

Progress Since Confederation.

The political union of Canada, as effected under the British North America Act, 1867, did much to stimulate agricultural progress throughout Canada, especially as it resulted in the establishment of the Dominion Department of Agriculture, whose efforts have been a powerful addition to those of the Provincial Departments of Agriculture. Universal agricultural depression in the eighties led to the creation of the experimental farm system and the consequent improvement of agricultural practice in many directions. Great changes in the incidence of farming operations were brought about by the opening up of the Prairie Provinces through the building of the Canadian Pacific Railway, completed for traffic in 1886. Various changes of fiscal policy on the part of both Canada and the United States have had important results. An influence, temporarily in the wrong direction, was the adoption in 1890 of the McKinley tariff, the effect of which was largely to exclude Canadian agricultural products from the United States. Grain growing in Ontario and Eastern Canada generally was adversely affected by this tariff and also by the rapidly increasing grain production of the Prairie Provinces under conditions of virginal fertility and low cost. These conditions diverted the trade in agricultural products from the United States to the United Kingdom, and gave rise to the establishment in Eastern Canada of cheese factories and creameries and to an important export trade in dairy products, especially cheese, to the United Kingdom. The introduction from Denmark in 1882 of the centrifugal cream separator was another noteworthy element in the expansion of the Canadian dairying industry. Through the efforts of the Dominion and Provincial Departments of Agriculture and other varied forms of associated activity, much improvement in agricultural practice has been accomplished. In connection with dairying alone, the present practice of forcing milk production in the winter as well as in the summer, largely through the use of corn silage, was undreamed of a generation ago. Similar remarks apply to the year-round forcing of meat production, also a practice now followed by advanced farmers where the conditions are suitable.

Towards the end of the nineteenth century a policy of extensively advertising the agricultural possibilities of Canada for the attraction of new immigrants was vigorously pursued and proved highly successful. The annually increasing tide of fresh settlers and the investment in Canada of large amounts of British capital were indeed outstanding features of the first decade of the present century, and the extraordinary progress in the settlement and development of the Prairie Provinces was due to these factors. The number of new immigrants arriving in a single year reached its maximum in 1913 with 402,432. Then came the outbreak of the great war in 1914, causing a complete disruption of national life and entailing consequences profoundly affecting agriculture. Reviewing the period as a whole in the light of the statistics available, it may be stated that with a population of 9,082,840 as compared with 3,454,000, the acreage under wheat has grown from 1,646,781 in 1870 to 22,672,000 in 1923, and the wheat production, which was not more than 16½ million bushels in 1870, reached the maximum of 474,199,000 bushels in 1923. Canada is,

in fact, at the present time the world's second largest wheat-producing and wheat-exporting country, ranking next to the United States; indeed in the years ended July 31, 1922 and 1923, Canadian wheat exports exceeded those of the United States. The value of all field crops, which in 1870 was estimated to be \$196,789,000, attained its maximum with \$1,537,170,100 in 1919 and was \$899,166,200 in 1923. For 1870 the value of farm live stock has been estimated at about \$142,000,000, whilst in 1923 the estimated value was \$613,260,000.

2.—The Government in Relation to Agriculture.

It is provided in section 95 of the British North America Act that "in each province the Legislature may make laws in relation to agriculture in the province"; it is also "declared that the Parliament of Canada may from time to time make laws in relation to agriculture in all or any of the provinces; and any law of the Legislature of a province relative to agriculture . . . shall have effect in and for the province as long and as far only as it is not repugnant to any Act of the Parliament of Canada." In other words, the right of concurrent legislation by the Dominion Parliament and Provincial Legislatures is expressly established.

As a result of this provision, there exist at the present time Departments of Agriculture with Ministers of Agriculture at their head both in the Dominion and in all the nine provinces, though in most of the provinces the portfolio of agriculture is combined with one or more other portfolios in the hands of a single Minister. A short sketch of the functions of the various Departments is appended.

1.—The Dominion Department of Agriculture.

The Dominion Department of Agriculture was constituted in 1868 under authority of 31 Vict., c. 53, with numerous functions that were by no means purely agricultural, including (1) agriculture; (2) immigration and emigration; (3) public health and quarantine; (4) the marine and immigrant hospital at Quebec; (5) arts and manufactures; (6) the census, statistics and the registration of statistics; (7) patents of invention; (8) copyright; (9) industrial designs and trade marks.

In the course of time the purely agricultural work of the Department came to demand greater attention; the non-agricultural functions were one by one entrusted to other Departments of the Government, while specialization became the order of the day within the Department itself. At the present time it includes the following branches: (1) Experimental Farms; (2) Dairy and Cold Storage; (3) Health of Animals; (4) Live Stock; (5) Seed; (6) Entomological; (7) Fruit; (8) Publications; (9) Agricultural Instruction Act; (10) International Agricultural Institute.

For the Acts of Parliament administered by the Dominion Department of Agriculture, see in the index "Acts of Parliament, list of principal, administered by Departments of Dominion Government." For the publications of the Department, covering a wide field of information, see in the index the entry "Publications of the Dominion Government."

2.—Provincial Departments of Agriculture.

Prince Edward Island.—The Department is under a Minister entitled Commissioner of Agriculture, and supervises agricultural instruction, the agricultural and technical high school, the cheese and butter factories, and the women's institutes of the province.

Nova Scotia.—The Department of Agriculture of Nova Scotia is divided into six main branches: (1) Agricultural Societies, Exhibitions and Associations, (2) Horticultural Branch, (3) Entomological Branch, (4) Dairying Branch, (5) Poultry Branch, (6) Women's Institutes.

New Brunswick.—The branches of the New Brunswick Department were in 1923 as follows: Immigration and Farm Settlement, Elementary Agricultural Education, Agricultural Societies, Dairy, Live Stock, Horticulture, Soils and Crops, Poultry, Apiary, and Women's Institutes.

Quebec.—The Quebec Department of Agriculture includes the following divisions: Dairy, Agronomy, Live Stock, Horticulture, Poultry, Council of Agriculture.

Ontario.—The Ontario Department of Agriculture includes the following branches: Agricultural Societies, Live Stock, Institutes and Dairy, Fruit, Co-operation and Markets, Statistics and Publications, Agricultural Representatives, Colonization and Immigration. The Department conducts the affairs of the Ontario Agricultural College and the Ontario Veterinary College at Guelph, and of the Agricultural School at Kemptville.

Manitoba.—The Manitoba Department of Agriculture includes an Agricultural Extension Service, a Dairy Branch, a Publications and Statistics Branch, a Live Stock Branch and a Game Branch. It also conducts the Manitoba Agricultural College.

Saskatchewan.—The Saskatchewan Department includes six principal branches: Live Stock, Field Crops, Dairy, Bureau of Statistics, Game and Co-operative Organization.

Alberta.—The Alberta Department conducts the following main services: Dairy, Live Stock, Veterinary, Agricultural Schools and Demonstration Farms, Seeds and Weeds, Poultry, Fairs and Institutes, Branding, Crop Reports and Statistics.

British Columbia.—The branches of the Department of Agriculture are: Horticultural, Live Stock, Dairy, Inspection and Fumigation of Imported Fruits, Nursery Stock, etc., Entomology and Plant Pathology, Markets, Apiary Inspection, Statistics and Publications.

For the publications of the Provincial Departments of Agriculture, see in the index the entry "Publications of Provincial Governments."

3.—Agricultural Experimental Stations of Canada.

Among the most important contributions of Canadian Governments to the development of agriculture throughout the country, is the maintenance of agricultural experimental stations where research work in both plant and animal breeding, and adaptation to climatic conditions, is carried on. Already this work has had a profound effect in the improvement of Canadian agriculture. The introduction during recent years of Marquis wheat is an outstanding example. This variety, which is the result of crossing the Red Fife with an early-ripening Indian wheat, known as Hard Red Calcutta, was produced by the Cereal Division of the Central Experimental Farm at Ottawa under the direction of Dr. C. E. Saunders in 1903. Possessing qualities rendering it specially adapted to growth upon the prairies, the Marquis has now almost entirely superseded the Red Fife, and has increased by millions of dollars annually the revenue derived from wheat-growing by the farmers of Western Canada. Amongst the earlier experiments undertaken, the results of

which have passed permanently into good Canadian farm practice, may be mentioned those relating to early seeding, summer fallowing, the use of farmyard manure, the fertilizing value of clover crops and the introduction into western agriculture of suitable grasses and clovers. Both the common red clover and alfalfa are now entering into western rotations as the result of efforts on the part of the farms to obtain hardy strains and to discover means of resistance to winter-killing. Further experiments with earlier-ripening and drought-resisting cereals are now being carried on, each new discovery increasing the cultivable area of Canada. Other researches relate to the production of frost-resisting fruit trees for the Prairie Provinces. This research work has already had a profoundly ameliorating effect upon Canadian agriculture; a statement regarding the work now under way at the Dominion and Provincial Experimental Stations is appended.

Dominion Experimental Farms and Stations.

Central and Branch Farms.—Inaugurated in 1886 by Act of Parliament, the Dominion Experimental Farms system was at first made up of the Central Farm at Ottawa and four Branch Farms: one at Nappan, Nova Scotia, for the Maritime Provinces; one at Brandon for Manitoba; one at Indian Head for the Northwest Territories; and one at Agassiz for British Columbia.

The opening up and rapid settlement of the Dominion have led to a corresponding increase in the number of Experimental Farms and Stations.¹ These, with the two Tobacco Stations, now total 24, with a total acreage of 13,001, as compared with the original five Farms, having a total acreage of 3,472, as established in 1886. The following table shows the present number of Farms and Stations with the acreage of each and the date of establishment.

DOMINION EXPERIMENTAL FARMS AND STATIONS, 1924.

Farm or Station.	Province.	Acreage.	Date established.
Central Farm, Ottawa.....	Ontario.....	467	1886
Kapuskasing Station.....	Ontario.....	1,282	1916
Harrow Tobacco Station.....	Ontario.....	249	1909
Charlottetown Station.....	Prince Edward Island.....	155	1909
Nappan Farm.....	Nova Scotia.....	460	1886
Kentville Station.....	Nova Scotia.....	434	1912
Fredericton Station.....	New Brunswick.....	520	1912
Ste. Anne de la Pocatière Station.....	Quebec.....	340	1911
Cap Rouge Station.....	Quebec.....	339	1911
Lennoxville Station.....	Quebec.....	455	1914
La Ferme Station.....	Quebec.....	1,200	1916
Farnham Tobacco Station.....	Quebec.....	65	1912
Brandon Farm.....	Manitoba.....	625	1886
Morden Station.....	Manitoba.....	302	1915
Indian Head Farm.....	Saskatchewan.....	680	1886
Rosthern Station.....	Saskatchewan.....	650	1908
Scott Station.....	Saskatchewan.....	520	1910
Swift Current Station.....	Saskatchewan.....	640	1920
Lacombe Station.....	Alberta.....	850	1907
Jethbridge Station.....	Alberta.....	400	1906
Invermere Station.....	British Columbia.....	293	1912
Summerland Station.....	British Columbia.....	550	1914
Agassiz Farm.....	British Columbia.....	1,400	1886
Sidney Station, Vancouver Island.....	British Columbia.....	125	1912

¹ The five original farms established in 1886 are known as "Experimental Farms"; those added since are styled "Experimental Stations." No distinction in the work is implied by these titles.

In addition there are nine sub-stations, *viz.*: Salmon Arm, B.C.; Swede Creek, Yukon Territory; fort Vermilion, Grouard and Beaverlodge, Alberta; forts Smith, Resolution and Providence, Northwest Territories; and Betsiamites, Saguenay County, Que. Experimental work under the Division of Illustration Stations is conducted on 6 farms in Prince Edward Island, 15 in Nova Scotia, 17 in New Brunswick, 35 in Quebec, 20 in Saskatchewan, 12 in Alberta and 13 in British Columbia.

Organization of the System of Experimental Farms.—The Central Farm at Ottawa, as its name implies, is the centre or headquarters of the system. Thereat are situated the Director, having control and general supervision of the whole, and the chief technical officers, each having charge of his special line of work, both at the Central and Branch Farms. At Ottawa, the policy to be pursued throughout the system is settled by agreement after discussion by the Director, the technical officers and the superintendents on whose branch farms the work is to be conducted. The technical staff at Ottawa supervises the actual experimental work at the Central Farm. At the branches, the superintendents are in charge of the carrying out of the various lines of general experiment, and also conduct experiments of local importance.

The Divisions at Ottawa, which represent the different lines of work carried on throughout the system, and which have each a technical officer in charge, are as follows: (1) Animal Husbandry; (2) Bacteriology; (3) Bees; (4) Botany; (5) Cereals; (6) Chemistry; (7) Extension and Publicity; (8) Economic Fibre Production; (9) Field Husbandry; (10) Forage Plants; (11) Horticulture; (12) Illustration Stations; (13) Poultry and (14) Tobacco. Briefly the main lines of the work of these Divisions are as follows:—

Animal Husbandry.—This Division engages in work with beef cattle, dairy cattle and dairying, horses, sheep and swine, and undertakes experiments in the breeding, feeding, housing and management of each of these classes of live stock.

Bacteriology.—The work of this Division is of two types, routine and research. The former includes the bacteriological analysis of water, milk, foods and feeding stuffs, and the manufacture and furnishing of nitro-cultures for legume growing. The main work is of an investigational nature, in which close co-operation with the other Divisions is maintained in research work having a bacteriological bearing.

Botany.—The work of this Division falls into two classes, economic botany and plant pathology. The former includes the study of medicinal, poisonous and economic plants. Different varieties and strains of fibre plants are also studied, and special attention is given to the life history and control of weeds. The Division also has charge of the arboretum at the Central Farm. In plant pathology, in addition to the pathological laboratory at Ottawa, there are laboratories at Charlottetown, P.E.I., Fredericton, N.B., Ste. Anne de la Pocatière, Que., St. Catharines, Ont., Brandon, Man., Indian Head, Sask., and Summerland, B.C. Investigations are being conducted into diseases affecting forest trees, fruit trees, cereals, small fruits, potatoes, vegetables and tobaccos.

Cereals.—In the Cereal Division, the work comprises the production, by cross-breeding and selection, of new varieties of grains and the testing of these as to their suitability for various parts of Canada. Approved varieties are grown on a larger scale and samples are distributed free to applicant farmers. Among the more recent varieties produced in this Division and now widely grown in Canada are the Arthur pea and the Huron, Marquis and Prelude wheats. Two interesting varieties now being introduced are the Ruby wheat, ripening not quite as early as Prelude but yielding better, and the Liberty hull-less oat, which should greatly widen the

field of usefulness of this cereal and simplify the processes of its manufacture into food for man and beast. The Division also carries on extensive milling and baking tests.

Chemistry.—The work of the Division of Chemistry comprises the analysis of fodders and feeding stuffs, fertilizers, soils, well waters, insecticides, fungicides, etc. It also assists other Divisions in chemical problems and does a large amount of analytical work for other Branches of the Department and for military and civilian use abroad. Field tests with various kinds and quantities of fertilizers are carried on by this Division at a number of the branch farms and stations.

Extension and Publicity.—This Division acts as a connecting link between the Experimental Farms and the farmer by making the work of the former as widely known as possible. Two chief means used are exhibits at as many fairs as possible each year and extension of the departmental mailing lists.

Economic Fibre Plants.—The Division studies the areas in Canada suitable for fibre production, the best varieties and strains of seed of fibre plants, cultural methods, harvesting, retting and scutching processes, etc. Chiefly for demonstrational purposes, the Division is operating at Clinton, Huron County, Ontario, a leased commercial flax mill.

Field Husbandry.—This Division applies, under field conditions, the results obtained by other Divisions more directly engaged in scientific research. Some of the main lines of work under way are test of fertilizers, methods of drainage, rotations and cultural methods. Data of cost of production of field crops are gathered in connection with this work.

Forage Plants.—The Division has for its work the variety testing of grasses, leguminous forage plants, field roots and Indian corn; plant breeding with these; the collection of genera and species likely to be of value as forage plants; the study of the possibilities and methods of growing root seed, including sugar beets, in Canada, and the distribution for trial of seed of varieties newly obtained and not available commercially.

Horticulture.—The work of the Division of Horticulture falls under four main heads: vegetable gardening, orcharding and small fruits, ornamental gardening and plant breeding. In the three first named, the testing of varieties is a main feature, with a view to ascertaining the hardiest, earliest, best-yielding and most disease-resistant sorts. In plant breeding, the aim is the improvement of existing sorts by cross-breeding. Greenhouse work is also given special attention at Ottawa. Canning experiments and demonstrations are carried on.

Illustration Stations.—This Division forms another connecting link between the Experimental Farms and the farmer. The stations are now 125 in number. Each is located on the farm of a representative farmer, who does the work according to directions framed to illustrate the best rotations, the best varieties of crops, and the best cultural methods, as determined by the work of years on the Experimental Farms.

Poultry.—The scope of work of the Poultry Division has been greatly extended during the last few years. It now covers the following main lines of investigation: artificial and natural incubation, poultry breeding, systems of breeding and rearing, production of heavy-laying strains, feeding for eggs and table, and housing of poultry. Poultry survey work, *i.e.*, the endeavour to get groups of farmers in various localities to keep accurate records of their poultry costs and returns, is already showing results in the better housing, breeding and care of the farm flock. Egg-laying contests and record of performance work are carried on.

Tobacco.—The Tobacco Division deals with the breeding, variety tests and cultural methods, the warehousing and marketing of tobacco. A complete analysis of the soils of the tobacco-producing regions of Canada is being made. During the growing season, inspectors examine the tobacco fields of as many growers as possible, with a view to suggesting the best cultural methods and means of combating diseases and insect pests.

In addition to the work done by the Divisions of Extension and Publicity and Illustration Stations, the results of the work of the Experimental Farms are made available to the farmer (1) by correspondence; (2) by publications; (3) by "Seasonable Hints," a 16-page pamphlet, brought out every four months, with a circulation of about 342,000 and now in its tenth year; and (4) by articles in the press. The farm officers devote considerable time each year to lecturing, demonstrating, judging at fairs and assisting at short courses in agriculture. Excursions to the various farms are also a valuable means of bringing the work to the attention of the farmer.

Provincial Agricultural Colleges and Experimental Stations.

Nova Scotia.

College of Agriculture, Truro.—About 430 acres are devoted to general farming, gardening and investigations. Conducted primarily as a college and distributing station for pure-bred live stock and seeds, investigational work does not occupy so prominent a position as it does at a purely experimental station. Nevertheless, practical experiments are being carried on, amongst which the following, together with those described on pages 305 and 306 of the 1921 Year Book, are the most important.

A permanent pasture experiment was begun thirteen years ago to determine the value of top dressing with basic slag, acid phosphate and wood ashes. In addition, the application of crude kainite is now being tried on the permanent pasture. Fairly extensive experiments are being tried with Wild Kentish clover as a pasture crop.

Experiments to determine the fertilizing value of a crude salt mined at Mahagash have given good results for mangolds, but results with other crops have not been impressive.

Three classes of silage crops are being tried under identical conditions, *viz.*: corn, sunflowers and O.P.V. (the college name for a mixture of oats, peas and vetches). The value of the O.P.V. mixture is now thoroughly proved under Nova Scotia conditions. Sunflowers have given good results for four years, but corn has proved very variable. A trench silo filled in 1922 gave very satisfactory results. Field and garden experiments have shown good results from the use of home-grown oats, wheat, turnips and tomatoes, as compared with seed of these crops grown elsewhere. Experiments already carried on for two years are being continued in the control of scab in potatoes by the application of ground sulphur and inoculated sulphur. Experiments have been conducted in the control of the cabbage root maggot, and with insects affecting orchard fruits, carrots and other vegetables. The cabbage root maggot is now perfectly controlled, but further work remains to be done with other root and vegetable pests. Extensive experiments in the control of insect pests on fruit trees are being carried out, mainly at points in the Annapolis valley, where conditions are more favourable for such investigations than at the college. Model orchards at some 35 localities outside of the recognized fruit belt are operated to determine varieties and methods suitable for these localities. Details

of the college experimental work, including results obtained, are published in the Annual Report of the Secretary for Agriculture for the Province.

The College enrolls about 50 to 100 students annually in its regular course and from 200 to 300 annually in various short courses. Numerous extension short courses are annually conducted at various centres in the province.

A college prospectus, issued annually, contains complete accounts of the nature of the studies in these courses.

Quebec.

Macdonald College, Ste. Anne de Bellevue.—The College is situated about 20 miles west of Montreal and is incorporated with McGill University. The College property comprises 786 acres, divided as follows: main farm, 584 acres; agronomy plots, 75 acres; poultry department, 17 acres; orchard, 35 acres; vegetable gardens, 25 acres; the campus, including driveways, lawns, trees, shrubs, flower beds, school garden and recreation fields for students of both sexes, 50 acres. The agricultural engineering, agronomy, animal husbandry, bacteriology, botany, chemistry, horticulture, physics, poultry, zoology and entomology departments are all well equipped for the numerous researches and experiments under way. In the *School of Agriculture*, the courses offered include 4-year courses, leading to the B.S.A. and B.Sc. in Agr. degrees, a 4½ months winter practical course for farmers and farmers' sons, and various short courses. Postgraduate work can be taken in agronomy, bacteriology, chemistry, entomology and plant pathology—the higher degrees offered being M.S.A., M.Sc. and Ph.D. In the *School of Household Science*, the courses include a 4-year course, leading to the degree of Bachelor of Household Science, a 2-year institution administration course, a 1-year home-maker course, three short courses, each of about 3 months duration, in household science, etc. In the *School for Teachers*, courses under the Protestant Committee of the Council of Public Instruction of the Province of Quebec are offered leading to model, kindergarten and elementary diplomas. The teaching and experimental staff of the College consists of about 60 members. The total enrolment for 1922-23 was 768. More complete information respecting the work of the College will be found on record in the Canada Year Books of 1916-17, pp. 241-242, and 1918, pp. 235-237. The annual report of the College and the annual announcement should be consulted.

School of Agriculture, Ste. Anne de la Pocatière.—This school, with accommodation for 125 boarders, is situated on the southern slope of a hill dominating a farm of nearly 600 acres. Within one mile of the Intercolonial Railway and on the Quebec-Rivière-du-Loup line, it is easily accessible, and attracts thousands of visitors, who seek agricultural information from both the school and the Dominion Experimental Station, which is not more than a mile from the village. The students of the school are divided into (1) those taking a four-years' agronomic course, and (2) those receiving special practical training for two years. The school is affiliated to Laval University, Quebec, which awards the degree of B.S.A. (Bachelor of Science in Agriculture) to successful students of the first class, whilst those in the other receive a Certificate of Agricultural Proficiency (Brevet de Capacité Agricole). Lectures in adjacent parishes are frequently given by the school professors, who also conduct agricultural pages in two of the largest provincial weeklies for the extension of new agricultural information. Cultural experiments are also undertaken at the school, and bulletins are published.

Oka Agricultural Institute.—Situated on the lake of Two Mountains, about 20 miles from Montreal, the Oka Agricultural Institute is one of the oldest experimental farms in Canada. It was affiliated to Laval University of Montreal (now University of Montreal) on March 25, 1908. The total area of the farm comprises 1,800 acres, including all kinds of soil. Horticulture holds an important place. The area devoted to fruit trees is about 40 acres, and includes 4,000 trees (apples, cherries, pears and plums) grown according to the most recent methods. Special attention is given to the breeding of live stock. The dairy herd is of considerable importance and has been entirely formed at the Institute itself. Official milk records begun in 1918 have already resulted in the registration of 52 animals in the "Record of Performance," with an average yield exceeding 10,000 lb. of milk. The raising of swine, poultry and bees is also practised. The poultry houses shelter thousands of birds, amongst them the famous hen "Chantecler," bred by the poultry manager and registered in the United States Standard of Perfection in 1921. Mention should also be made of the modern rabbit hutch, 70 ft. x 13 ft., probably unique of its kind in Canada. The Institute can accommodate about 150 indoor students. The present curriculum includes (1) a scientific course of four years leading to the University degree of B.S.A.; (2) a practical course of two years for young men less advanced, embracing all the principal agricultural subjects such as general agriculture, cereals, fodder plants, rural and hygienic construction, machines and motors, the cultivation of fruits and vegetables, and the breeding and utilization of farm live stock. The famous Oka cheese (Port du Salut) made at this Institute is widely known throughout the North American continent.

Ontario.

Ontario Agricultural College and Experimental Farm, Guelph.—The College and Experimental Station were established in 1874 to train young farmers in the science and practice of agriculture and to conduct agricultural experiments for the benefit of the province. The land property consists of a little more than 700 acres of average loam soil. The farm property consists of 500 acres; experimental plots of about 100 acres and campus and woodlots form the remainder. The growth of the institution as an educational centre has been very rapid. Academic work at the present time requires the space and equipment of sixteen large buildings for dormitories, class rooms and laboratories. Courses offered include a four-year course for the degree of B.S.A. (Bachelor of Science in Agriculture), a two-year course for the Associate Diploma, winter courses for farmers and farmers' sons, summer courses for teachers of the province and domestic science courses at Macdonald Institute. The teaching and experimental staff consists of about seventy-five members. In 1874 the College opened with 28 students. The total enrolment in long and short courses in the academic year 1922-23 was 1,564. More complete information respecting the researches and experimental work undertaken at the college will be found on record in the Canada Year Book of 1916-17, pp. 243-245, and 1918, pp. 238-241. Reference may also be made to the Forty-ninth Annual Report of the College, covering the year 1923.

Manitoba.

Manitoba Agricultural College, Winnipeg.—The Field Husbandry Department is conducting researches and experiments in the following lines: (1) Forage Crop Improvement; (2) Cereal Crop Improvement; (3) Soil and Crop Manage-

ment; (4) Co-operative Experiments; and (5) Studies in Quality of Farm Crops. The work of the Forage Crop Improvement division has for its object the production and improvement of plants suitable under Manitoba conditions for pasture, hay and fodder. The major investigations are being conducted with alfalfa, red clover, sweet clover and corn. Work is also being done with timothy, western rye, brome, meadow fescue and meadow foxtail grasses. In the Cereal Crop division, the aim is the improvement of cereal crops, flax, peas and buckwheat, for use in the various districts of Manitoba. Special attention is being given to the development of disease-resistant strains of suitable market value. The work of the Soil and Crop Management section was planned for the following purposes: (1) To give data for teaching and lecture work; (2) To give first-hand information, so that daily inquiries on soil and crop management might be answered from the results of experiments; (3) To give material for the publication of bulletins from time to time on provincial field problems. The problems under investigation are cereal crop management, perennial crop management, annual forage crop management, hoed crop management, crop sequence or rotations, soil fertility, soil cultivation, preservation of forage crops. The departments of Botany and Horticulture, Physics, Animal Husbandry, Chemistry and Engineering are also carrying on numerous investigations.

Saskatchewan.

University of Saskatchewan, Saskatoon.—The College of Agriculture has over 1,300 acres of land (exclusive of the site for the buildings) at the University and another 560 acres about 35 miles distant which were bequeathed to the College by a pioneer settler, an ex-student of the University of Cambridge, England. Of the 1,300 acres, 210 acres are set aside for experimental work in field husbandry and horticulture. Two hundred and seventy acres of prairie were purchased in 1918, 100 acres of which have been broken for the Field Husbandry department. The remaining 800 acres are operated as a general farm with great diversification of crops. The buildings, paddocks, etc., are located on an adjoining half section of land designated as the campus or building plot. The College offers a four-year course leading to the degree of Bachelor of Science in Agriculture (B.S.A.), and a three-year associate course for farmers' sons intending to make farming their life work. Short courses in general agriculture, tillage, crops, live stock, poultry, dairying and engineering are held for adult farmers during the winter months, both at the College and at various points throughout the province.

Practical experiments are undertaken in the departments of field and animal husbandry, poultry, dairy, soils and horticulture, as well as a variety of scientific investigations in the departments of chemistry, physics, biology, engineering, etc. Special equipment and staff are provided for investigations in animal and plant diseases and entomology. Considerable progress has been made in an intensive soil survey of the province, and in breeding a rust-resistant wheat.

Alberta.

College of Agriculture, Edmonton South.—A College of Agriculture has been established at the University of Alberta, Edmonton South. A definite four-year course with matriculation entrance leading to the B. Sc. degree is under way.

Students from the provincial schools of agriculture will enter the second year of the course after satisfying special entrance requirements. At these schools various experiments are in progress as described in the 1920 edition of the Year Book, p. 286. At the College itself numerous agricultural experiments are also being conducted including the following tests: determination as to whether the present varieties of wheat, oats, barley and peas are suitable for the Park Belt sections of Alberta; breeding and selection of promising varieties of wheat for earlier maturity combined with high milling qualities; the testing of alfalfa, red clover, sweet clover and alsike for winter hardiness, and of sweet clover in the Open Plains sections to determine its drought hardiness; varieties of corn and sunflowers for fodder; relative suitability of corn and sunflowers for the Park Belt; selection of a suitable grain corn for the dry sections; growth of alfalfa and sweet clover for hay and seed; nurse crops with clover and timothy. Extensive experiments in the feeding of cattle, sheep and swine have been under way for four years. They include both winter seeding and summer pasture work. Other researches have been made on the utilization of the best native grasses of Alberta; hay and pasture production; effects of frost on grain; production of alfalfa seed; factors of hardiness in winter wheat; sunflowers; potatoes; seed production; various experiments with cattle, sheep and swine. A start has been made in a definite soil survey of the province, beginning with the soil-blown area of the south.

British Columbia.

Department of Agriculture.—*Horticultural Branch.*—Horticultural demonstration work of various kinds is being undertaken. This includes work in the control of the strawberry root weevil (*Otiorhynchus ovatus*), the testing out of various oil and other sprays for the control of fruit pests and diseases. Work has also been undertaken with a view to ascertaining the value of cover crop and commercial fertilizers in keeping up the fertility of the orchard.

Soil and Crop Branch.—The seed potato inspection and certification work started in 1921 by the Soil and Crop Branch was continued and extended during 1923, in co-operation with the provincial plant pathologist.

University of British Columbia.—Further progress has been made with the clearing and preparation of land for experimental and general farm purposes. About 150 acres are now under crop. In the departments of agronomy and horticulture, plant improvement and breeding work have rapidly advanced. In the department of animal husbandry excellent foundation stock has been purchased, consisting of Jerseys, Ayrshires, Shorthorns and Hereford cattle; Yorkshire and Berkshire pigs; Southdown, Shropshire and Oxford Down sheep. The foundation stock in Clydesdales was obtained from Colony Farm, and has now increased to 15. In the department of dairying, good progress has been made in research, particularly with special kinds of cheese. In the department of poultry husbandry, pedigreed stock is maintained for improvement work in Barred Rocks, Rhode Island Reds, White Leghorns and White Wyandottes. In addition to the teaching and investigational work at the University, provision is made in the budget for the carrying out of considerable investigational work throughout the Province.

3.—Statistics of Agriculture.

Census Statistics.—At each of the six decennial censuses of Canada taken since Confederation, statistics of the agricultural activities carried on throughout the country have been secured, such, for example, in the later censuses, as the acreage sown, the yield of crops, the value of that yield, the number of fruit trees, the value of farms, the number of live stock, etc. In the publication of the results of each of these censuses, a special volume has been devoted to agricultural (and horticultural) activities, and this will be the case in the publications of the census of 1921, some of the results of which are used in the following statistics. Censuses of population and agriculture have also been taken for the three Prairie Provinces in 1906 and 1916. For comparative statistics of farm holdings, their size and tenure as in 1911 and 1921, see in the index, "Agricultural Statistics of the Census."

Crop-Reporting Service.—The voluntary crop-reporting service of the Dominion Government, which has been in operation since 1908, has for its object the issue of accurate, timely and independent reports on crop conditions throughout the Dominion: first, in the interests of the general body of Canadian farmers; secondly, for the information and guidance of other interests allied to and dependent upon agriculture (interests represented by statesmen, economists, bankers, grain dealers, transportation agents and others); and thirdly, for reporting to the Institute of Agriculture at Rome (to which Canada is an adhering country) in return for reports on the production of other countries and of world totals, which influence prices and consequently affect the interests of Canada. The crop-reporting season begins with the month of April with reports on the winter-killing and condition of fall wheat and of hay and clover. Thereafter, monthly reports are collected at the end of each month on the condition of field crops, whilst in June the reports of crop correspondents are used for the preliminary estimate of the areas sown. Subsequently, reports are collected on average yields per acre, local values, stocks on hand, etc. An important part of the work of the crop correspondents of the Government is the return of monthly reports on the condition of field crops during growth. These reports give a general idea of the influence of the season upon the crops and the prospects of the yield at harvest time. They are made in the form of general remarks, and are also expressed numerically by a method which permits of easy comparison with previous months or years. The results of the compilation of the reports received from correspondents are published as soon as ready, and are also cabled to the International Institute of Agriculture at Rome. In October, for root and fodder crops, in December, for grain crops, and in January, for land, farm live stock, wool and farm help, correspondents are requested to report on local farm values. Their reports are compiled into provincial and Dominion averages which are not only of interest and value in themselves, especially for comparative purposes, but also enable the Dominion Bureau of Statistics to calculate and publish total values of field crops and of live stock, which are indispensable to agricultural, banking and commercial interests. In view of the large volume now attained by the agricultural production of Canada, the leading position Canada occupies in respect of the world's market for wheat and the speculative nature of some of the crops reported on, the dates and exact times for the issue of the crop reports are fixed definitely in advance, while all reports are prepared under strict regulations to ensure secrecy during compilation. For the provinces of Saskatchewan and British Columbia, arrangements were made in 1924 under which the work of crop-reporting in these two provinces is jointly undertaken by the Dominion Bureau of Statistics and the Provincial Departments of Agriculture.

Annual Statistics.—Linked with the monthly crop-reporting service, but independent of it, are the plans for the collection of annual statistics of the areas under field crops and also of the numbers of farm live stock. These have been in force since 1918, and are carried out by the Dominion Bureau of Statistics in co-operation with the nine Provincial Governments. The statistics are secured by a simple schedule calling for a statement of the areas sown to field crops and of the numbers of farm animals alive on June 15. These statements are at present received from about one-fourth of the farmers of Canada, and they form the basis for estimation of the totals for the whole of Canada, the totals being calculated according to the proportion which exists between the number of returns and the total number of farmers. The results for wheat, oats, barley, rye and flax in the three Prairie Provinces are ready for publication in August, while the results for the remaining crops and for the numbers of farm live stock are published in November. The areas, thus determined, when multiplied by the average yields per acre as reported by crop correspondents, give the total estimated production for each crop.

In six of the provinces the schedules were distributed in 1923 through the agency of the rural schools; in British Columbia and in Prince Edward Island they were mailed direct to farmers; in Quebec, through the co-operation of the Quebec Bureau of Statistics, the schedules were distributed by local agents under the direction of the agronomists or district agricultural representatives. This system has been found effective in securing a larger sample of the farms of the country than could be obtained in any other way.¹

Monthly Bulletin of Agricultural Statistics.—Originally established in 1908 as the "Census and Statistics Monthly," but changed to its present title in April, 1917, this publication is now in its seventeenth year. It is the official organ not only for the monthly crop reports and annual statistics previously described, but also for statistics of dairying, fur farming, fruit, hops, tobacco, maple products, sugar beets, beet sugar, flax fibre, clover and grass seeds, exports, visible supplies, prices, values, foreign agriculture, and of other subjects in considerable variety. The results of special agricultural studies and inquiries are also published in the Bulletin. For the year 1923 the Monthly Bulletin consisted of 518 octavo pages.

Presentation of Agricultural Statistics.—In the current edition of the Year Book, the statistics of agriculture are presented under the following headings: (1) Agricultural revenue and wealth; (2) Acreage, yield, quality and value of principal field crops; (3) Farm live stock and poultry; (4) Fur farming; (5) Dairying; (6) Fruit production; (7) Special agricultural crops; (8) Farm labour and wages; (9) Prices of agricultural produce; (10) Agricultural statistics of the census; (11) Miscellaneous agricultural statistics; (12) World's principal agricultural statistics.

1.—Agricultural Revenue and Wealth.

Revenue.—Table 1 shows under principal headings the gross agricultural revenue of Canada, by provinces, for each of the six years 1918 to 1923. It is important to observe that the figures represent gross values, as no distinction is made between crops used as materials for other kinds of production, such as the feeding of live stock, and no allowance is made for the costs of production.²

¹ For further details respecting the crop-reporting service and the collection of annual statistics, see "Handbook for the Use of Crop Correspondents, with Selection of Annual Agricultural Statistics, 1908-23," published by the Dominion Bureau of Statistics in 1924.

² For explanation of the methods used in estimating values, see the Monthly Bulletin of Agricultural Statistics for March, 1922, pages 85 to 89.

1.—Estimated Gross Annual Agricultural Revenue of Canada, by Provinces,
1918-1923.

('000" omitted.)

Items.	1918.	1919.	1920.	1921.	1922.	1923.
	\$	\$	\$	\$	\$	\$
Canada—						
Field crops.....	1,372,936	1,537,169	1,455,244	931,865	962,293	899,166
Farm animals.....	194,498	186,679	143,935	98,424	77,548	82,402
Wool.....	12,410	11,000	5,280	2,975	3,180	3,160
Dairy products.....	200,341	251,527	277,508	225,900	215,576	226,356
Fruits and vegetables.....	48,671	53,230	60,719	59,428	55,855	58,216
Poultry and eggs.....	40,000	40,000	45,000	51,363	58,815	58,647
Fur farming.....	1,048	1,048	1,140	1,499	1,538	1,538
Maple products.....	5,258	7,494	8,100	5,751	5,576	4,769
Tobacco.....	4,270	15,620	5,893	2,393	4,548	3,518
Flax fibre.....	2,286	5,524	434	—	—	—
Clover and grass seed.....	—	—	7,948	4,360	4,360	4,360
Totals.....	1,881,718	2,109,291	2,011,201	1,383,958	1,389,289	1,342,132
Prince Edward Island—						
Field crops.....	16,278	22,367	18,530	14,203	10,890	10,174
Farm animals.....	1,772	2,315	1,763	1,059	1,174	913
Wool.....	312	313	160	98	42	95
Dairy products.....	1,600	2,231	3,484	2,694	2,585	2,715
Fruits and vegetables.....	300	300	300	300	300	300
Poultry and eggs.....	720	720	810	792	985	869
Fur farming.....	833	833	767	952	843	842
Clover and grass seed.....	—	—	106	21	21	21
Totals.....	21,815	29,079	25,920	20,119	16,840	15,929
Nova Scotia—						
Field crops.....	42,486	63,357	47,847	29,557	24,140	20,505
Farm animals.....	4,654	5,074	4,122	2,235	2,089	1,774
Wool.....	1,207	955	544	278	338	306
Dairy products.....	2,632	3,719	10,973	9,272	8,744	9,180
Fruits and vegetables.....	10,000	10,000	12,451	15,000	13,500	7,776
Poultry and eggs.....	800	800	900	865	1,063	927
Fur farming.....	54	54	49	68	89	89
Maple products.....	40	45	45	29	28	28
Clover and grass seed.....	—	—	20	28	28	28
Totals.....	61,873	84,004	76,951	57,332	50,019	40,613
New Brunswick—						
Field crops.....	42,891	53,134	46,357	38,326	31,979	20,864
Farm animals.....	3,681	4,869	3,934	2,315	2,433	1,608
Wool.....	653	707	378	176	252	197
Dairy products.....	1,419	2,214	9,238	7,615	7,125	7,481
Fruits and vegetables.....	1,200	1,207	1,073	1,077	1,000	1,195
Poultry and eggs.....	960	960	1,080	885	1,496	1,042
Fur farming.....	55	55	127	149	183	183
Maple products.....	50	53	53	63	60	43
Clover and grass seed.....	—	—	58	40	40	40
Totals.....	50,909	63,199	62,298	50,646	44,568	32,653
Quebec—						
Field crops.....	276,777	309,963	330,251	219,154	165,160	133,137
Farm animals.....	40,862	37,683	31,250	20,262	18,325	15,339
Wool.....	3,956	3,351	1,979	1,203	1,185	1,077
Dairy products.....	58,004	68,432	72,982	59,437	58,274	61,188
Fruits and vegetables.....	8,000	7,820	7,865	7,272	7,555	7,315
Poultry and eggs.....	5,040	5,040	5,670	5,467	9,327	8,913
Fur farming.....	49	49	40	117	181	181
Maple products.....	4,418	6,396	6,747	4,319	4,188	3,483
Tobacco.....	2,320	6,780	2,640	613	1,790	1,575
Clover and grass seed.....	—	—	1,038	372	372	372
Totals.....	399,126	445,514	460,462	318,216	266,357	232,580

**1.—Estimated Gross Annual Agricultural Revenue of Canada, by Provinces,
1918-1923—concluded.**
("000" omitted.)

Items.	1918.	1919.	1920.	1921.	1922.	1923.
	\$	\$	\$	\$	\$	\$
Ontario—						
Field crops.....	384,014	383,574	375,747	239,627	222,599	220,749
Farm animals.....	68,916	70,288	59,953	36,051	35,468	32,345
Wool.....	3,880	3,477	1,354	613	818	7,955
Dairy products.....	102,216	130,041	117,757	95,478	87,526	91,903
Fruits and vegetables.....	16,620	16,658	22,823	16,581	16,200	22,263
Poultry and eggs.....	14,400	14,400	16,200	19,966	24,108	25,367
Fur farming.....	11	11	52	66	124	124
Maple products.....	750	1,000	1,255	1,340	1,300	1,215
Tobacco.....	1,950	8,840	3,253	1,730	2,758	1,943
Flax fibre.....	2,286	5,524	434	—	—	—
Clover and grass seed.....	—	—	5,539	3,647	3,647	3,647
Totals.....	595,043	633,813	604,367	415,149	394,548	400,511
Manitoba—						
Field crops.....	180,508	182,097	133,990	72,136	98,078	60,707
Farm animals.....	13,781	12,990	9,342	5,738	2,728	5,082
Wool.....	504	529	171	71	82	73
Dairy products.....	11,420	13,092	15,349	12,474	12,593	13,223
Fruits and vegetables.....	1,900	1,900	1,900	1,900	1,900	1,702
Poultry and eggs.....	3,640	3,640	4,095	4,101	3,784	3,198
Fur farming.....	—	—	—	81	35	35
Clover and grass seed.....	—	—	494	61	61	61
Totals.....	211,753	214,248	165,341	96,562	119,261	84,081
Saskatchewan—						
Field crops.....	299,362	340,030	271,213	215,635	296,227	248,778
Farm animals.....	24,033	22,946	15,076	12,229	6,532	11,912
Wool.....	493	439	196	135	184	142
Dairy products.....	6,051	9,346	21,730	18,384	18,443	19,366
Fruits and vegetables.....	1,400	1,400	1,400	1,400	1,400	2,461
Poultry and eggs.....	7,840	7,840	8,820	10,352	8,786	8,670
Fur farming.....	—	—	78	27	7	7
Clover and grass seed.....	—	—	265	103	103	103
Totals.....	339,179	382,001	318,778	258,265	331,682	291,439
Alberta—						
Field crops.....	113,072	158,044	204,292	82,780	94,947	165,340
Farm animals.....	33,164	26,353	16,054	16,065	8,133	11,584
Wool.....	1,243	1,102	445	377	231	264
Dairy products.....	10,387	14,620	18,257	14,645	14,794	15,534
Fruits and vegetables.....	1,500	1,500	1,500	1,500	1,500	1,860
Poultry and eggs.....	4,480	4,480	5,040	5,314	6,154	6,264
Fur farming.....	26	26	12	23	46	46
Clover and grass seed.....	—	—	374	58	58	58
Totals.....	163,872	206,125	245,974	120,762	125,863	200,950
British Columbia—						
Field crops.....	17,548	24,603	27,017	20,447	18,273	18,912
Farm animals.....	3,635	4,161	2,441	2,470	666	1,845
Wool.....	162	127	53	24	48	51
Dairy products.....	6,612	7,832	7,738	5,901	5,492	5,767
Fruits and vegetables.....	7,751	12,445	11,407	14,398	12,500	13,344
Poultry and eggs.....	2,120	2,120	2,385	3,621	3,112	3,397
Fur farming.....	20	20	15	16	30	30
Clover and grass seed.....	—	—	54	30	30	30
Totals.....	37,848	51,308	51,110	46,907	40,151	43,376

The table shows that in 1923 the total estimated agricultural revenue of Canada was \$1,342,132,000, as compared with \$1,389,289,000 in 1922, \$1,383,958,000 in 1921, \$2,011,201,000 in 1920 and \$2,109,291,000, the peak year, in 1919. The total for 1923, viz., \$1,342,132,000, shows a net decrease, as compared with 1922, of

\$47,157,000, or 3.4 p.c. The revenue from animals shows a slight recovery, and other items also have increased, but the total diminution is due to the considerable drop in the value of field crops, amounting to \$63,127,000, or 6.6 p.c. Speaking generally, it will be noticed that for the last three years the totals of the various items exhibit greater stability, though of course values, so far as they depend upon the volume of production, vary with the character of each season. This, for both 1922 and 1923, has on the whole been favourable.

Comparing the provinces for 1923, Ontario leads with a total value of \$400,511,000, and the provinces next in order are: Saskatchewan, \$291,439,000; Quebec, \$232,580,000; Alberta, \$200,950,000; Manitoba, \$84,081,000; British Columbia, \$43,376,000; Nova Scotia, \$40,613,000; New Brunswick, \$32,653,000 and Prince Edward Island, \$15,929,000.

Wealth.—Table 2 shows approximately, by provinces, for 1923, the gross agricultural wealth of the Dominion.

2.—Estimated Gross Agricultural Wealth of Canada, by Provinces, 1923.

("000" omitted.)

Description.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	\$	\$	\$	\$	\$
Lands	28,476	49,155	61,112	546,666	808,124
Buildings	17,289	51,173	45,158	285,530	491,330
Implements and machinery	6,870	10,146	13,545	111,940	169,954
Live stock	7,513	16,569	14,357	109,695	211,326
Poultry	684	738	1,034	6,845	15,675
Animals on fur farms	2,689	383	715	674	856
Agricultural production	15,929	40,613	32,653	232,580	400,511
Totals	79,450	168,777	168,574	1,293,930	2,097,776

Description.	Mani- toba.	Saskat- chewan.	Alberta.	British Columbia.	Canada.
	\$	\$	\$	\$	\$
Lands	315,245	877,042	523,221	107,020	3,316,061
Buildings	113,005	216,398	121,765	41,036	1,382,684
Implements and machinery	67,848	176,676	98,814	9,379	665,172
Live stock	47,136	107,476	83,812	15,376	613,260
Poultry	2,250	6,192	4,189	2,233 ¹	39,840
Animals on fur farms	450	92	249	218 ¹	6,326
Agricultural production	84,081	291,439	200,950	43,376	1,342,132
Totals	630,015	1,675,315	1,033,000	218,638	7,365,475

¹ Including Yukon Territory, \$95,510.

The values of lands, buildings, implements and machinery for the census year 1921 are considerably more than the values previously used in these calculations, which were based upon the census of 1911. The increase for the three items during the decade amounted to \$1,115,986,000. There has, however, undoubtedly been a fall in the value of land during the last two years consequent upon the fall in the prices of agricultural products and live stock, and there may also have been some change in the values of buildings, machinery and implements, but to what extent it is impossible to state. The estimates collected from crop correspondents of the value per acre of land, including buildings, show a drop in the value of land per acre from \$40 in 1921 to \$37 in 1923, resulting from decreases in most of the

provinces. The rates of change thus shown have been applied to the census data with the result that the census figure of \$3,702,370,000, the value of land in 1921, becomes \$3,316,061,000 as the estimated value in 1923. The census values for buildings, machinery and implements in 1921 are applied without change to 1923.

Altogether, therefore, the gross agricultural wealth of Canada for 1923 may be estimated at \$7,365,475,000, as compared with \$6,774,461,000 in 1922. The net increase of \$591,014,000 is made up of an increase in land, buildings, implements and machinery amounting to \$739,669,000, set against a decrease in the other items of live stock, poultry, animals on fur farms and agricultural production, amounting to \$148,655,000.

2.—Acreage, Yield, Quality and Value of Principal Field Crops.

Total Areas and Values, 1918-1923.—Table 3 shows for Canada and the provinces, the total estimated areas and values of field crops for the six years 1918 to 1923, and Table 4 the field crops of Canada, compared as to quantity and value for 1922 and 1923.

3.—Total Areas and Values of Field Crops in Canada, 1918-23.

Provinces.	1918.	1919.	1920.	1921.	1922.	1923.
	acres.	acres.	acres.	acres.	acres.	acres.
Canada.....	51,427,190	53,049,640	52,830,865	59,635,346	57,189,681	57,230,534
P. E. Island.....	488,180	526,628	536,105	552,184	543,069	507,979
Nova Scotia.....	910,387	1,011,144	919,547	807,858	789,096	682,538
New Brunswick.....	1,188,200	1,335,118	1,253,834	1,171,305	1,205,817	909,945
Quebec.....	8,201,362	7,973,021	7,905,987	8,051,989	7,435,300	6,650,158
Ontario.....	10,000,063	9,915,884	10,108,272	10,075,073	10,258,613	10,296,961
Manitoba.....	6,325,150	6,344,318	6,020,310	7,421,786	6,747,240	6,719,522
Saskatchewan.....	16,332,872	17,430,554	17,347,901	21,774,483	19,833,167	19,772,830
Alberta.....	7,739,391	8,170,971	8,389,521	9,417,870	10,005,623	11,316,542
British Columbia.....	241,585	342,002	349,388	362,798	371,756	374,059
	\$	\$	\$	\$	\$	\$
Canada.....	1,372,935,970	1,537,170,100	1,455,244,050	931,863,670	962,293,200	899,166,200
P. E. Island.....	16,277,800	22,367,400	18,530,400	14,202,970	10,889,800	10,173,900
Nova Scotia.....	42,486,200	63,357,000	47,846,550	29,556,400	24,140,400	20,505,100
New Brunswick.....	42,891,270	53,134,400	46,357,300	38,325,400	31,979,000	20,864,300
Quebec.....	276,776,900	309,963,000	330,251,000	219,154,000	165,159,600	133,137,400
Ontario.....	384,013,900	383,573,900	375,746,900	239,627,400	222,599,400	220,748,900
Manitoba.....	180,507,500	182,097,200	133,989,900	72,135,500	98,078,000	60,706,700
Saskatchewan.....	299,362,100	340,029,800	271,213,000	215,635,000	296,227,200	248,777,900
Alberta.....	113,072,700	158,044,400	204,291,500	82,780,000	94,946,800	165,340,000
British Columbia.....	17,547,600	24,603,000	27,017,500	20,447,000	18,273,000	18,912,000

4.—Field Crops of Canada, compared as to Quantity and Value, 1922 and 1923.
 ("000" omitted.)

Field Crops.	Actual Value, 1923.	Value at prices of 1922.	Actual Value, 1922.	Increase (+) or decrease (—).	Due to higher (+) or lower (—) prices.	Due to larger (+) or smaller (—) quantities.
	\$	\$	\$	\$	\$	\$
Fall wheat.....	17,850	19,420	19,059	— 1,209	— 1,570	+ 361
Spring wheat.....	299,084	382,650	320,360	— 21,276	— 83,566	+ 62,290
All wheat.....	316,934	402,070	339,419	— 22,485	— 85,136	+ 62,651
Oats.....	184,857	212,980	185,455	— 598	— 28,123	+ 27,525
Barley.....	32,571	35,716	33,335	— 764	— 3,145	+ 2,381
Rye.....	11,340	13,412	18,703	— 7,363	— 2,072	+ 5,291
Peas.....	4,987	5,319	5,818	— 831	— 332	— 499
Beans.....	2,773	2,975	3,714	— 941	— 202	— 739
Buckwheat.....	8,192	8,176	8,141	+ 51	+ 16	+ 35
Mixed grains.....	17,655	17,717	16,501	+ 1,154	— 62	+ 1,216
Flaxseed.....	12,644	12,315	8,639	+ 4,005	+ 329	+ 3,676
Corn for husking.....	12,466	11,352	11,510	+ 956	+ 1,114	— 158
Potatoes.....	56,397	50,096	50,320	+ 6,077	+ 6,301	— 224
Turnips, mangolds, etc.....	22,483	20,705	23,886	— 1,403	+ 1,778	— 3,181
Hay and clover.....	162,882	199,754	194,950	— 32,068	— 36,872	+ 4,804
Grain hay.....	15,064	55,829	20,910	— 5,846	— 40,765	+ 34,919
Alfalfa.....	11,915	13,133	10,294	+ 1,621	— 1,218	+ 2,839
Fodder corn.....	24,605	26,426	29,198	— 4,593	— 1,821	+ 2,772
Sugar beets.....	1,401	1,702	1,600	— 99	— 301	+ 202
Total.....	899,166	1,089,677	962,293	— 63,127	— 190,511	+ 127,384
Increase or decrease.....	—	—	—	p.c. — 6.56	p.c. — 19.80	p.c. + 13.24

Field Crops.—In Table 5 are presented for Canada, by provinces, estimates of the area, yield, quality and value of the principal field crops for the years 1922 and 1923, with the five-year averages for the period 1918 to 1922. The estimates of 1923 are based upon statistics collected from nearly 160,000 farmers throughout Canada in June of that year under arrangements made between the Dominion and Provincial Governments in accordance with plans dating from 1917 for the four provinces of Quebec, Saskatchewan, Alberta and British Columbia, and from 1918 for the remaining five provinces of Prince Edward Island, Nova Scotia, New Brunswick, Ontario and Manitoba.

Season of 1922-23.—The winter of 1922-23 was of exceptional severity and length, but the proportion of fall wheat that was winter-killed did not exceed 7 p.c., as compared with the ten-year average of 16 p.c. The great depth of the snow, whilst protecting crops in the ground, delayed seeding operations, which were very late, especially in Quebec, Ontario and Manitoba. But with plenty of moisture in the ground in most of the provinces, crops progressed rapidly when sown, and with timely rains during June the prospects at the end of that month were very favourable. Rust, excessive heat and attacks of sawfly caused, however, great deterioration in Manitoba during July and August, and also, to a lesser extent, in Saskatchewan; so that the Manitoba wheat crop in the end turned out to be a very poor one in contrast with the excellent one of the previous year. In Saskatchewan the grain harvest was from fair to good, only a small area in the south sharing in extreme the adverse conditions of Manitoba. In Alberta, heavy rains at the end of May brought welcome moisture after a long period of drought, and from that time the crops never looked back, and in the end produced the highest yields on record in the history of the province.

Areas and Yields of Grain Crops.—The total yield of wheat in Canada for the year 1923 was finally estimated at 474,199,000 bushels from an area of 22,671,864 acres, as compared with 399,786,400 bushels from 22,422,693 acres in 1922 and with 269,233,910 bushels from 20,079,832 acres, the annual average for the five years 1918-22. The total for 1923 consisted of 19,315,000 bushels from 815,706 harvested acres of fall wheat and of 454,884,000 bushels from 21,856,158 sown acres of spring wheat. The total wheat crop of 474,199,000 bushels for 1923 is the largest on record for Canada, and compares with 399,786,400 bushels, the record crop of 1922, and with 393,542,600 bushels, the previous record crop of 1915. The average yield per acre for all wheat in 1923 was 21 bushels, as compared with $17\frac{3}{4}$ bushels in 1922, with $13\frac{1}{2}$ bushels, the five-year average (1918-22), and with 26 bushels, the record of 1915. For fall wheat the average yield per acre in 1923 was $23\frac{3}{4}$ bushels, against $21\frac{1}{4}$ bushels in 1922 and $22\frac{1}{4}$ bushels, the five-year average. For spring wheat the average for 1923 was $20\frac{3}{4}$ bushels, as compared with $17\frac{3}{4}$ bushels in 1922 and 13 bushels, the five-year average.

Oats yielded in 1923 the total of 563,997,500 bushels from 14,387,807 acres, as compared with 491,239,000 bushels from 14,541,229 acres in 1922, and with 453,776,220 bushels from 15,416,527 acres, the five-year average. The total for 1923 is the highest on record, the previous record being 530,709,700 bushels in 1920. The average yield per acre was $39\frac{1}{4}$ bushels, as against $33\frac{3}{4}$ bushels in 1922 and $29\frac{1}{2}$ bushels, the five-year average. Barley yielded the total of 76,997,800 bushels from 2,784,571 acres, as compared with 71,865,300 bushels from 2,599,520 acres in 1922 and with 65,712,318 bushels from 2,749,165 acres, the five-year average. The average yields per acre were $27\frac{3}{4}$ bushels in 1923, $27\frac{3}{4}$ bushels in 1922, and 24 bushels, the five-year average. Flaxseed yielded, in 1923, 7,139,500 bushels from 629,938 acres, as compared with 5,008,500 bushels from 565,479 acres in 1922, and with 5,729,200 bushels from 937,605 acres, the five-year average. The yield per acre was 11.30 bushels in 1923, as against 8.85 bushels in 1922 and 6.10 bushels, the five-year average.

For the remaining cereal crops the total yields for 1923 were in bushels as follows, the corresponding totals for 1922 and for the five-year average being shown within parentheses: rye, 23,231,800 (32,373,400; 16,769,372); peas, 2,898,200 (3,170,100; 3,437,576); beans, 1,041,700 (1,303,300; 1,722,096); buckwheat, 9,743,700 (9,701,200; 9,770,400); mixed grains, 29,750,500 (27,707,700; 29,182,780), and corn for husking, 13,608,000 (13,798,000; 14,836,500).

Root and Fodder Crops.—The total yield of potatoes in 1923 was 55,497,000 cwt. from 560,942 acres, as compared with 55,745,300 cwt. from 683,594 acres in 1922, and with 67,680,880 cwt. from 744,801 acres, the five-year average. The average yield per acre in 1923 was 99 cwt., as compared with 81.55 cwt. in 1922 and with $90\frac{3}{4}$ cwt., the five-year average. Turnips, mangolds, etc., gave a total of 38,116,500 cwt. from 194,512 acres in 1923, as against 43,973,500 cwt. from 224,256 acres in 1922, and 51,847,640 cwt. from 276,910 acres, the five-year average. The yield per acre was 196 cwt., as compared with 196.10 cwt. in 1922, and with $187\frac{1}{4}$ cwt., the five-year average. Sugar beets produced 216,200 tons in 1923 from 22,450 acres, as against 190,400 tons from 20,725 acres in 1922, and 258,160 tons from 25,576 acres, the five-year average. The yield per acre was 9.60 tons in 1923, 9.20 tons in 1922 and 10.10 tons—the average. Of hay and clover the total yield was in 1923 14,844,900 tons from 9,725,602 acres, as compared with 14,488,200 tons from 10,001,667 acres in 1922, and with 14,062,660 tons from 10,427,182 acres, the average. The yields per acre were 1.55 ton in 1923, 1.45 ton in 1922 and 1.35 ton, the average.

Grain hay yielded 4,336,100 tons from 1,920,432 acres, an average yield per acre of 2 $\frac{1}{4}$ tons. Of alfalfa the total yield in 1923 was 1,028,600 tons from 391,116 acres, as compared with 806,400 tons from 305,933 acres in 1922, and with 598,598 tons from 246,336 acres, the average. The yield per acre was 2.65 tons in 1923, 2.65 tons in 1922 and 2.45 tons, the average for the five years. Fodder corn yielded 5,320,800 tons from 659,070 acres in 1923, as against 5,879,000 tons from 654,624 acres in 1922 and 5,522,522 tons from 568,567 acres, the five-year average. The yield per acre was 8.10 tons in 1923, 9 tons in 1922 and 9.70 tons, the average for the five years.

Values of Field Crops.—The average prices per unit, as received by farmers in 1923, are estimated from the reports of crop correspondents for all Canada as follows; the corresponding prices for 1922 and for the five-year average, 1918-22, are given within parentheses: per bushel: fall wheat, 92 cents (\$1.01; \$1.63); spring wheat, 66 cents (84 cents; \$1.36); all wheat, 67 cents (85 cents; \$1.37); oats, 33 cents (38; 56); barley, 42 cents (46; 79); rye, 49 cents (58; 91); peas, \$1.72 (\$1.84; \$2.47); beans, \$2.66 (\$2.85; \$4.33); buckwheat, 84 cents (84; \$1.24); mixed grains, 59 cents (60; 95); flaxseed, \$1.77 (\$1.72; \$2.50); corn for husking, 92 cents (83; \$1.18); per cwt.: potatoes, \$1.02 (90; \$1.43); turnips, mangolds, etc., 59 cents (54; 79); per ton: hay and clover, \$10.97 (\$13.46; \$19.78); alfalfa, \$11.58 (\$12.77; \$18.76); grain hay, \$3.47 (\$12.88, 1922); sugar beets, \$6.48 (\$7.88; \$10.05).

The total values of field crops in 1923 are estimated as follows, the corresponding values for 1922 and for the five-year average, 1918-22, being given within parentheses: wheat, \$316,934,700 (\$339,419,000; \$369,822,400); oats, \$184,857,400 (\$185,455,000; \$252,084,020); barley, \$32,570,700 (\$33,335,300; \$52,223,964); rye, \$11,339,900 (\$18,703,200; \$15,231,350); peas, \$4,987,400 (\$5,818,200; \$8,486,060); beans, \$2,773,000 (\$3,713,800; \$7,457,280); buckwheat, \$8,191,700 (\$8,140,800; \$12,157,500); mixed grains, \$17,654,800 (\$16,500,700; \$27,628,004); flaxseed, \$12,643,900 (\$8,638,900; \$14,328,000); corn for husking, \$12,466,000 (\$11,509,700; \$17,480,580); potatoes, \$56,397,800 (\$50,320,000; \$96,680,080); turnips, mangolds, etc., \$22,483,100 (\$23,886,000; \$41,185,960); hay and clover, \$162,882,000 (\$194,950,000; \$278,174,180); alfalfa, \$11,914,000 (\$10,295,000; \$11,231,480); grain hay, \$15,063,800; fodder corn, \$24,605,000 (\$29,197,600; \$36,279,600); sugar beets, \$1,401,000 (\$1,500,000; \$2,594,340). The aggregate value of all field crops in 1923 is \$899,166,200, as compared with \$962,293,200 in 1922, a decrease of \$63,127,000, caused mainly by lower prices applicable to almost every crop. The hay and clover crop alone, however, accounts for a decrease of \$32,068,000, the average price per ton having fallen from \$13.46 to \$10.97.

5.—Area, Yield, Quality and Value of Principal Field Crops in Canada, 1922-23 and Five-Year Average, 1918-22.

Field Crops.	Area.	Yield per acre.	Total yield.	Weight per measured bushel.	Average price per bushel.	Total value.
	acres.	bush.	bush.	lb.	\$	\$
Canada—						
Fall wheat.....1922	892,569	21.25	18,956,000	59.91	1.01	19,059,000
1923	815,706	23.75	19,315,000	60.23	0.92	17,850,900
Average.....1918-22	703,349	22.25	15,578,840	60.24	1.63	25,461,500
Spring wheat.....1922	21,530,124	17.75	380,830,400	60.31	0.84	320,360,000
1923	21,856,158	20.75	454,884,000	58.55	0.66	299,083,800
Average.....1918-22	19,375,883	13.00	253,655,070	58.94	1.36	344,360,900

5.—Area, Yield, Quality and Value of Principal Field Crops in Canada, 1922-23 and Five-Year Average, 1918-22—con.

Field Crops.	Area.	Yield per acre.	Total yield.	Weight per measured bushel.	Average price per bushel.	Total value.
Canada—con.	acres.	bush.	bush.	lb.	\$	\$
All wheat.....1922	22,422,693	17.75	399,786,400	60.24	0.85	339,419,000
1923	22,671,864	21.00	474,199,000	58.80	0.67	316,934,700
Average.....1918-22	20,079,232	13.50	269,233,910	59.25	1.37	369,822,400
Oats.....1922	14,541,229	33.75	491,239,000	35.68	0.38	185,455,000
1923	14,387,807	39.25	563,997,500	35.55	0.33	184,857,400
Average.....1918-22	15,416,527	29.50	453,776,220	34.81	0.56	252,084,020
Barley.....1922	2,599,520	27.75	71,865,300	47.66	0.46	33,335,300
1923	2,784,571	27.75	76,997,800	47.19	0.42	32,570,700
Average.....1918-22	2,749,165	24.00	65,712,318	46.98	0.79	52,223,964
Fall rye.....1923	1,097,982	16.25	17,769,000	54.52	0.49	8,654,200
Spring rye.....1923	350,160	15.50	5,462,800	54.68	0.49	2,685,700
All rye.....1922	2,105,367	15.50	32,373,400	55.71	0.58	18,703,200
1923	1,448,142	16.00	23,231,800	54.61	0.49	11,339,900
Average.....1918-22	1,181,179	14.25	16,769,372	55.38	0.91	15,231,350
Peas.....1922	178,890	17.75	3,170,100	60.08	1.84	5,818,200
1923	169,330	17.00	2,898,200	60.00	1.72	4,987,400
Average.....1918-22	204,863	16.75	3,437,576	59.90	2.47	8,486,060
Beans.....1922	79,899	16.25	1,303,300	59.39	2.85	3,713,800
1923	63,151	16.50	1,041,700	59.09	2.66	2,773,000
Average.....1918-22	105,339	16.25	1,722,096	59.42	4.33	7,457,280
Buckwheat.....1922	430,982	22.50	9,701,200	47.80	0.84	8,140,800
1923	440,121	22.25	9,743,700	47.80	0.84	8,191,700
Average.....1918-22	432,609	22.50	9,770,460	47.55	1.24	12,157,500
Mixed grains.....1922	779,800	35.50	27,707,700	44.33	0.60	16,500,700
1923	843,757	35.25	29,750,500	44.19	0.59	17,654,800
Average.....1918-22	855,202	34.00	29,182,780	44.36	0.95	27,628,004
Flaxseed.....1922	565,479	8.85	5,008,500	55.04	1.72	8,638,900
1923	629,938	11.30	7,139,500	54.63	1.77	12,643,900
Average.....1918-22	937,605	6.10	5,729,200	54.61	2.50	14,328,000
Corn for husking.....1922	318,397	43.25	13,798,000	55.45	0.83	11,509,700
1923	317,729	42.75	13,608,000	55.29	0.92	12,466,000
Average.....1918-22	284,304	52.25	14,836,500	55.36	1.18	17,480,580
Potatoes.....1922	683,594	cwt. 81.55	55,745,300	—	per cwt. 0.90	50,320,000
1923	560,942	99.00	55,497,000	—	1.02	56,397,800
Average.....1918-22	744,801	90.75	67,680,880	—	1.43	96,680,080
Turnips, mangolds, etc.....1922	224,256	196.10	43,973,500	—	0.54	23,886,000
1923	194,512	196.00	38,116,500	—	0.59	22,483,100
Average.....1918-22	276,910	187.25	51,847,640	—	0.79	41,185,960
Hay and clover.....1922	10,001,667	tons. 1.45	14,488,200	—	per ton. 13.46	194,950,000
1923	9,725,602	1.55	14,844,900	—	10.97	162,882,000
Average.....1918-22	10,427,182	1.35	14,062,660	—	19.78	278,174,180 ¹
Grain hay (Alberta).....1922	1,220,000	1.25	1,525,000	—	12.00	18,300,000
Grain hay (B.C.).....1922	56,626	1.75	99,100	—	26.34	2,610,000
Grain hay ¹1923	1,920,432	2.25	4,336,100	—	3.47	15,063,800
Alfalfa.....1922	305,933	2.65	806,400	—	12.77	10,914,000
1923	391,116	2.65	1,028,600	—	11.58	11,914,000
Average.....1918-22	246,336	2.45	598,598	—	18.76	11,231,480
Fodder corn.....1922	654,624	9.00	5,879,000	—	4.97	29,197,600
1923	659,070	8.10	5,320,800	—	4.62	24,605,000
Average.....1918-22	568,567	9.70	5,522,522	—	6.57	36,279,600
Sugar beets.....1922	20,725	9.20	190,400	—	7.88	1,500,000
1923	22,450	9.60	162,200	—	6.48	1,401,000
Average.....1918-22	25,576	10.10	258,160	—	10.05	2,594,340

¹ Manitoba, Saskatchewan, Alberta and British Columbia.

5.—Area, Yield, Quality and Value of Principal Field Crops in Canada, 1922-23 and Five-Year Average, 1918-22—con.

Field Crops.	Area.	Yield per acre.	Total yield.	Weight per measured bushel.	Average price per bushel.	Total value.
	acres.	bush.	bush.	lb.	¢	¢
Prince Edward Island—						
Spring wheat.....1922	32,531	21.25	688,800	59.79	1.25	863,000
1923	30,756	15.25	575,000	59.23	1.14	654,800
Average.....1918-22	34,037	17.25	589,060	58.83	1.83	1,078,240
Oats.....1922	182,599	35.75	6,533,000	32.00	0.41	2,662,000
1923	187,891	35.00	5,881,100	36.76	0.44	2,564,700
Average.....1918-22	180,034	31.75	5,724,600	34.52	0.64	3,691,200
Barley.....1922	4,716	29.00	136,300	48.47	1.01	137,700
1923	7,464	27.50	205,000	49.56	0.74	152,500
Average.....1918-22	5,481	26.75	146,540	48.73	1.14	167,510
Peas.....1922	277	21.00	5,800	59.00	2.35	13,600
1923	199	24.00	4,800	58.00	2.50	12,000
Average.....1918-22	321	18.00	5,780	58.93	2.61	15,100
Buckwheat.....1922	2,723	27.25	74,200	47.00	0.82	60,800
1923	2,852	28.75	82,300	47.40	0.90	74,400
Average.....1918-22	3,875	23.50	90,360	47.48	1.21	109,280
Mixed grains.....1922	17,326	37.75	652,200	41.00	0.63	407,700
1923	17,859	41.25	737,900	43.20	0.57	420,500
Average.....1918-22	16,595	38.00	628,820	42.58	0.93	587,404
Potatoes.....1922	35,553	74.75	2,657,700	—	0.50	1,329,000
1923	31,400	87.00	2,732,000	—	0.65	1,776,000
Average.....1918-22	35,315	90.00	3,175,356	—	0.96	3,051,040
Turnips, mangolds, etc..1922	8,115	285.00	2,313,000	—	0.36	833,000
1923	8,628	250.00	2,157,000	—	0.30	647,000
Average.....1918-22	9,611	265.50	2,552,520	—	0.50	1,282,380
Hay and clover.....1922	258,559	1.45	379,400	—	12.00	4,553,000
1923	240,381	1.35	321,300	—	12.00	3,856,000
Average.....1918-22	243,507	1.35	332,160	—	19.40	6,442,800
Fodder corn.....1922	670	7.50	5,000	—	6.00	30,000
1923	549	5.65	3,100	—	5.00	16,000
Average.....1918-22	457	8.75	3,952	—	7.27	28,720
Nova Scotia—		bush.	bush.		per bush.	
Spring wheat.....1922	14,493	20.25	293,600	59.08	1.60	470,000
1923	12,737	18.75	239,000	59.03	1.33	320,300
Average.....1918-22	23,714	19.75	469,900	58.92	2.23	1,045,600
Oats.....1922	136,862	33.25	4,549,000	34.50	0.66	2,988,000
1923	113,015	34.25	3,879,000	34.57	0.72	2,803,600
Average.....1918-22	146,123	33.25	4,846,840	34.27	0.94	4,549,060
Barley.....1922	7,155	27.25	194,000	47.96	0.98	191,000
1923	7,130	29.00	207,100	47.73	1.08	225,000
Average.....1918-22	10,558	28.00	204,700	47.49	1.49	440,920
Rye.....1922	243	20.25	4,900	56.00	1.38	6,800
1923	146	18.75	2,700	56.00	1.00	2,700
Average.....1918-22	532	21.00	11,192	54.63	1.56	17,510
Peas.....1922	639	22.00	14,000	57.00	3.00	42,000
1923	521	18.50	9,600	60.56	2.59	24,000
Average.....1918-22	1,222	19.50	23,876	58.00	3.49	83,220
Beans.....1922	3,108	19.00	59,000	58.83	4.00	236,000
1923	1,993	17.25	34,400	59.33	3.00	103,000
Average.....1918-22	5,279	16.50	86,540	58.78	6.03	521,440
Buckwheat.....1922	8,657	24.00	208,000	46.94	0.98	189,000
1923	7,952	23.75	188,300	47.67	1.15	216,500
Average.....1918-22	13,579	23.25	315,180	47.32	1.31	414,100
Mixed grains.....1922	4,495	30.50	137,500	45.76	0.85	117,000
1923	3,486	34.25	119,000	46.56	0.90	107,000
Average.....1918-22	5,833	30.25	178,440	43.69	1.24	221,340

5.—Area, Yield, Quality and Value of Principal Field Crops in Canada, 1922-23 and Five-Year Average, 1918-22—con.

Field Crops.	Area.	Yield per acre.	Total yield.	Weight per measured bushel.	Average price per cwt.	Total value.
	acres.	cwt.	cwt.	lb.	\$	\$
Nova Scotia—con.						
Potatoes.....1922	38,051	97.10	3,695,400	—	0.97	3,572,000
1923	27,567	120.00	3,311,000	—	1.21	4,014,000
Average.....1918-22	48,124	106.10	5,106,600	—	1.55	7,922,800
Turnips, mangolds, etc..1922	16,162	215.60	3,484,500	—	0.60	2,090,000
1923	12,382	203.00	2,514,000	—	0.60	1,508,000
Average.....1918-22	21,132	231.10	4,883,070	—	0.99	4,833,000
		tons.	tons.		per ton.	
Hay and clover.....1922	558,052	1.55	871,000	—	16.25	14,154,000
1923	494,547	1.80	890,200	—	12.50	11,128,000
Average.....1918-22	609,121	1.60	978,740	—	21.72	21,252,800
Fodder corn.....1922	1,179	7.55	8,900	—	9.50	84,600
1923	1,062	10.00	10,600	—	5.00	53,000
Average.....1918-22	2,340	8.75	20,400	—	8.60	175,520
New Brunswick—						
		bush.	bush.		per bush.	
Spring wheat.....1922	22,629	17.50	396,000	59.29	1.73	685,000
1923	14,460	19.00	275,000	59.13	1.67	458,700
Average.....1918-22	33,047	17.25	570,130	59.21	2.19	1,246,800
Oats.....1922	313,937	30.75	9,666,000	35.55	0.58	5,606,000
1923	225,695	31.00	7,007,400	35.44	0.56	3,939,100
Average.....1918-22	287,532	29.25	8,442,800	34.53	0.75	6,333,400
Barley.....1922	7,551	25.00	188,000	48.28	0.94	177,000
1923	5,596	29.75	166,500	48.08	0.98	163,200
Average.....1918-22	8,378	23.50	196,268	47.54	1.28	251,416
Rye.....1922	580	19.00	11,000	57.00	1.00	11,000
1923	100	30.00	3,000	—	1.10	3,300
Average.....1918-22	395	17.75	7,000	56.50	1.40	9,780
Peas.....1922	2,227	14.25	32,000	60.73	2.81	90,000
1923	1,497	15.25	22,800	59.73	2.66	60,600
Average.....1918-22	3,194	14.50	46,160	60.04	2.95	136,300
Beans.....1922	3,559	18.00	64,000	59.67	3.35	214,000
1923	1,851	14.75	27,300	57.94	4.35	118,800
Average.....1918-22	4,401	16.00	70,736	59.43	5.12	361,920
Buckwheat.....1922	54,605	25.00	1,393,000	48.50	0.97	1,351,000
1923	43,010	25.00	1,076,100	48.19	0.85	909,800
Average.....1918-22	63,582	23.25	1,476,260	47.63	1.31	1,934,440
Mixed grains.....1922	3,632	31.00	113,000	49.11	0.84	95,000
1923	2,434	29.00	70,600	44.33	0.79	55,800
Average.....1918-22	4,141	30.50	125,780	43.72	1.10	138,480
		cwt.	cwt.		per cwt.	
Potatoes.....1922	74,811	98.50	7,369,000	—	0.83	6,116,000
1923	45,522	132.75	6,043,000	—	1.00	6,043,000
Average.....1918-22	72,173	106.25	7,662,212	—	1.33	10,217,960
Turnips, mangolds, etc..1922	16,202	198.65	3,218,000	—	0.78	2,510,000
1923	10,799	194.00	2,095,000	—	0.76	1,592,000
Average.....1918-22	19,353	180.25	3,508,490	—	0.71	2,778,020
		tons.	tons.		per ton.	
Hay and clover.....1922	700,581	1.50	1,051,000	—	14.00	14,714,000
1923	555,105	1.15	638,800	—	11.50	7,346,000
Average.....1918-22	729,654	1.30	953,940	—	19.74	18,828,720
Alfalfa.....1918	1,178	1.50	1,800	—	9.00	16,200
Fodder corn.....1922	5,503	7.50	41,000	—	10.00	410,000
1923	3,876	10.00	38,800	—	5.00	194,000
Average.....1918-22	4,770	6.50	30,900	—	9.61	297,000

5.—Area, Yield, Quality and Value of Principal Field Crops in Canada, 1922-23 and Five-Year Average, 1918-22—con.

Field Crops.	Area.	Yield per acre.	Total yield.	Weight per measured bushel.	Average price per bushel.	Total value.
	acres.	bush.	bush.	lb.	\$	\$
Quebec—						
Spring wheat.....1922	145,047	15.75	2,286,000	59.39	1.53	3,491,000
1923	74,478	16.00	1,194,000	59.00	1.47	1,753,000
Average.....1918-22	232,893	16.50	3,865,800	58.99	2.21	8,547,400
Oats.....1922	2,252,016	27.75	62,281,000	36.25	0.62	38,614,000
1923	1,819,920	26.75	48,845,000	36.00	0.57	28,026,000
Average.....1918-22	2,179,712	26.50	57,908,600	35.89	0.83	48,214,000
Barley.....1922	155,578	22.75	3,549,000	46.80	0.92	3,277,000
1923	124,771	23.25	2,895,000	47.75	0.91	2,629,000
Average.....1918-22	193,158	23.25	4,485,400	47.32	1.35	6,082,000
Rye.....1922	18,736	15.50	288,500	53.10	1.26	364,400
1923	13,499	15.00	201,100	55.50	1.24	249,700
Average.....1918-22	26,936	17.00	460,500	54.67	1.76	810,680
Peas.....1922	64,006	14.25	914,000	60.03	2.74	2,508,000
1923	40,874	15.25	625,000	60.25	2.63	1,646,000
Average.....1918-22	75,851	15.25	1,160,200	60.12	3.40	3,943,200
Beans.....1922	29,812	17.00	505,500	58.77	3.15	1,592,000
1923	15,692	18.75	294,000	59.75	3.09	907,000
Average.....1918-22	49,385	17.75	880,100	59.47	4.65	4,088,800
Buckwheat.....1922	167,185	22.50	3,760,000	46.20	0.94	3,547,000
1923	156,031	21.75	3,385,000	48.25	0.96	3,264,000
Average.....1918-22	173,335	23.00	3,992,600	47.48	1.39	5,543,800
Mixed grains.....1922	139,697	26.75	3,744,000	43.32	0.79	2,957,000
1923	112,210	27.25	3,071,000	44.50	0.81	2,486,000
Average.....1918-22	160,658	26.75	4,295,800	44.55	1.20	5,143,600
Flaxseed.....1922	5,880	10.00	58,200	52.46	2.75	160,200
1923	3,000	8.65	26,000	54.00	2.41	62,700
Average.....1918-22	9,859	10.90	107,120	53.83	3.58	383,040
Corn for husking.....1922	53,379	28.00	1,492,000	53.72	1.28	1,911,000
1923	32,394	23.00	747,000	55.50	1.54	1,148,000
Average.....1918-22	49,119	29.50	1,450,400	55.35	1.59	2,308,800
Potatoes.....1922	206,234	cwt. 82.35	16,983,000	—	per cwt. 1.08	18,342,000
1923	157,817	118.75	18,761,000	—	1.02	19,177,000
Average.....1918-22	263,894	99.25	26,189,160	—	1.46	38,338,200
Turnips, mangolds, etc. 1922	48,812	158.15	7,719,000	—	0.86	6,638,000
1923	33,948	193.25	6,563,000	—	0.83	5,425,000
Average.....1918-22	73,706	157.25	11,591,000	—	0.98	11,372,160
Hay and clover.....1922	3,998,036	tons. 1.35	5,397,000	—	per ton. 14.00	75,558,000
1923	3,952,301	1.45	5,665,800	—	11.00	62,297,000
Average.....1918-22	4,309,491	1.25	5,642,780	—	21.00	118,518,080
Alfalfa.....1922	30,200	1.50	45,300	—	11.50	521,000
1923	21,940	2.15	47,200	—	7.50	354,000
Average.....1918-22	24,066	2.00	50,820	—	18.20	924,800
Fodder corn.....1922	120,592	7.25	874,000	—	6.50	5,681,000
1923	91,283	8.55	782,100	—	4.75	3,708,000
Average.....1918-22	91,467	8.00	722,420	—	8.36	6,042,340
Ontario—						
Fall wheat.....1922	813,935	bush. 21.90	17,793,000	59.89	per bush. 1.01	18,031,000
1923	717,307	23.10	16,599,000	60.22	0.96	15,902,900
Average.....1918-22	635,967	22.75	14,411,940	59.95	1.65	23,784,700
Spring wheat.....1922	124,206	16.90	2,100,000	58.81	1.00	2,100,000
1923	111,601	17.40	1,938,000	58.61	0.97	1,886,000
Average.....1918-22	251,410	17.75	4,464,140	58.34	1.92	8,551,000

**5.—Area, Yield, Quality and Value of Principal Field Crops in Canada, 1922-23 and
Five-Year Average, 1918-22—con.**

Field Crops.	Area.	Yield per acre.	Total yield.	Weight per measured bushel.	Average price per bushel.	Total value.
Ontario—con.	acres.	bush.	bush.	lb.	\$	\$
All wheat.....1922	938,141	21-25	19,893,000	59-44	1-01	20,131,000
1923	828,908	23-40	18,537,000	59-59	0-96	17,788,900
Average.....1918-22	887,377	21-25	18,876,080	59-34	1-71	32,335,700
Oats.....1922	3,034,090	38-20	116,034,000	34-48	0-40	46,404,000
1923	2,967,417	34-90	103,485,000	33-94	0-44	45,850,000
Average.....1918-22	2,921,582	36-25	105,584,180	33-49	0-62	65,687,660
Barley.....1922	433,922	32-20	13,972,000	47-73	0-57	7,932,000
1923	452,490	29-90	13,523,000	46-93	0-60	8,063,000
Average.....1918-22	522,003	30-00	15,632,610	46-96	0-93	14,599,840
Rye.....1922	152,709	16-40	2,500,000	56-13	0-76	1,900,000
1923	123,354	16-30	2,011,000	54-90	0-79	1,592,200
Average.....1918-22	132,293	16-00	2,131,500	55-27	1-20	2,548,920
Peas.....1922	105,544	19-70	2,077,000	59-81	1-40	2,907,000
1923	117,409	17-30	2,031,000	59-96	1-43	2,912,000
Average.....1918-22	112,362	17-75	1,985,020	59-91	1-92	3,802,140
Beans.....1922	39,999	15-60	623,000	59-13	2-48	1,545,000
1923	41,127	15-40	634,000	58-28	2-38	1,508,200
Average.....1918-22	42,451	14-75	621,460	59-82	3-62	2,247,120
Buckwheat.....1922	197,812	21-60	4,266,000	47-62	0-70	2,993,000
1923	230,276	21-80	5,012,000	47-08	0-74	3,727,000
Average.....1918-22	178,238	21-75	3,896,060	47-35	1-07	4,155,880
Mixed grains.....1922	552,399	38-50	21,270,000	44-38	0-58	12,255,000
1923	648,984	36-80	23,881,000	43-08	0-59	13,970,500
Average.....1918-22	600,106	36-75	22,073,720	43-91	0-90	19,766,580
Flaxseed.....1922	4,556	10-70	48,600	49-75	0-98	47,700
1923	6,766	10-20	68,700	47-96	1-11	76,200
Average.....1918-22	12,557	10-60	133,180	55-07	2-73	363,820
Corn for husking.....1922	265,018	46-50	12,306,000	56-07	0-78	9,598,700
1923	285,335	45-00	12,861,000	54-88	0-88	11,318,000
Average.....1918-22	235,185	57-00	13,386,100	56-69	1-13	15,171,780
Potatoes.....1922	172,858	cwt. 70-65	12,210,000	—	per cwt. 0-90	10,989,000
1923	164,682	69-75	11,479,200	—	1-27	14,559,800
Average.....1918-22	163,591	69-10	11,307,924	—	1-68	18,950,640
Turnips, mangolds, etc..1922	105,033	222-60	23,318,000	—	0-38	8,885,000
1923	102,091	207-00	21,125,500	—	0-48	10,047,100
Average.....1918-22	118,593	209-75	24,886,380	—	0-59	14,600,400
Hay and clover.....1922	3,575,662	tons. 1-56	5,568,000	—	per ton. 12-40	69,049,000
1923	3,596,484	1-60	5,799,400	—	10-20	62,671,000
Average.....1918-22	3,527,872	1-35	4,833,420	—	18-75	90,488,200
Alfalfa.....1922	221,326	2-84	629,100	—	11-55	7,266,000
1923	299,610	2-65	788,460	—	11-39	8,980,000
Average.....1918-22	170,430	2-50	425,696	—	17-50	7,464,080
Fodder corn.....1922	438,819	10-06	4,413,000	—	4-35	19,197,000
1923	409,628	8-90	3,651,000	—	4-46	16,284,000
Average.....1918-22	421,367	10-50	4,410,890	—	5-97	26,335,200
Sugar beets.....1922	20,725	9-20	190,400	—	7-88	1,500,000
1923	22,450	9-60	216,200	—	6-48	1,401,000
Average.....1918-22	25,576	10-10	238,160	—	10-05	2,594,340
Manitoba—		bush.	bush.		per bush.	
Spring wheat.....1922	3,125,556	19-25	60,051,000	60-52	0-83	49,842,000
1923	2,915,915	11-25	32,804,000	54-97	0-67	21,979,000
Average.....1918-22	3,038,733	14-75	45,152,880	58-82	1-56	70,332,800
All wheat.....1922	3,125,556	19-25	60,051,000	60-52	0-83	49,842,000
1923	2,915,915	11-25	32,804,000	54-97	0-67	21,979,000
Average.....1918-22	3,039,280	14-75	45,162,680	58-48	1-56	70,353,000

5.—Area, Yield, Quality and Value of Principal Field Crops in Canada, 1922-23 and Five-Year Average, 1918-22—con.

Field Crops.	Area.	Yield per acre.	Total yield.	Weight per measured bushel.	Average price per bushel.	Total value.
	acres.	bush.	bush.	lb.	\$	\$
Manitoba—con.						
Oats.....1922	1,851,608	40.25	74,433,000	36.04	0.31	23,074,000
1923	1,834,504	32.00	58,704,000	34.09	0.30	17,611,000
Average.....1918-22	1,902,820	30.75	58,740,800	34.32	0.51	30,002,000
Barley.....1922	968,783	29.75	28,863,000	47.54	0.41	11,834,000
1923	1,156,212	22.25	25,726,000	45.26	0.37	9,519,000
Average.....1918-22	969,583	23.00	22,235,480	46.26	0.71	15,861,800
Fall rye.....1923	284,987	14.00	3,990,000	54.29	0.52	2,075,000
Spring rye.....1923	52,541	12.00	630,000	52.94	0.52	328,000
All rye.....1922	421,603	16.75	7,078,000	55.19	0.61	4,318,000
1923	337,528	13.75	4,620,000	53.77	0.52	2,403,000
Average.....1918-22	273,480	15.25	4,197,980	58.71	1.00	4,210,220
Peas.....1923	1,062	18.00	19,000	60.00	1.50	28,500
Average.....1919-21	6,929	14.00	98,300	60.00	2.10	206,000
Mixed grains.....1922	13,503	30.00	405,000	48.00	0.38	154,000
1923	14,076	22.50	317,000	46.67	0.38	120,000
Average.....1918-22	22,688	25.00	568,000	43.61	1.17	665,200
Flaxseed.....1922	66,680	11.00	734,000	55.54	1.80	1,321,000
1923	139,519	10.00	1,395,000	55.65	1.89	2,637,000
Average.....1918-22	88,033	9.20	809,560	54.95	2.56	2,075,540
Potatoes.....1922	38,798	cwt. 96.00	cwt. 3,725,000	—	per cwt. 0.47	1,751,000
1923	28,524	68.50	1,942,000	—	0.92	1,787,000
Average.....1918-22	40,176	87.00	3,490,684	—	1.03	3,609,660
Turnips, mangolds, etc.....1922	4,630	145.25	673,000	—	0.56	377,000
1923	4,987	102.00	570,000	—	0.75	428,000
Average.....1918-22	6,480	108.79	704,990	—	0.97	683,560
Hay and clover.....1922	222,617	tons. 1.75	tons. 394,000	—	per ton. 10.00	3,940,000
1923	243,616	1.50	365,000	—	8.00	2,920,000
Average.....1918-22	202,036	1.54	311,960	—	14.00	4,366,380
Grain hay.....1923	3,690	2.00	7,400	—	3.00	22,200
Alfalfa.....1922	4,609	2.60	12,200	—	14.00	171,000
1923	7,566	2.50	19,000	—	10.00	190,000
Average.....1918-22	4,549	2.37	10,762	—	18.39	197,880
Fodder corn.....1922	28,853	7.50	216,000	—	6.00	1,296,000
1923	32,323	7.00	228,000	—	4.70	1,062,000
Average.....1918-22	18,480	6.50	119,540	—	10.15	1,213,000
Saskatchewan—						
Spring wheat.....1922	12,332,297	bush. 20.25	bush. 250,167,000	61.50	per bush. 0.85	212,642,000
1923	12,791,000	19.75	252,622,000	59.20	0.65	164,204,000
Average.....1918-22	11,157,340	13.25	146,757,560	59.96	1.26	184,746,000
Oats.....1922	5,098,104	35.25	179,708,000	35.93	0.29	52,115,000
1923	4,898,771	44.50	218,075,000	36.45	0.25	54,519,000
Average.....1918-22	5,142,539	27.75	142,236,000	35.21	0.43	60,821,800
Barley.....1922	636,456	29.00	18,511,000	47.97	0.38	6,971,600
1923	640,402	30.00	19,278,200	47.87	0.35	6,747,000
Average.....1918-22	569,016	22.25	12,642,900	47.09	0.62	7,782,120
Fall rye.....1923	385,876	14.50	5,601,000	54.49	0.45	2,520,000
Spring rye.....1923	183,048	16.75	2,981,000	55.43	0.45	1,341,000
All rye.....1922	900,931	18.00	16,164,000	56.23	0.53	8,567,000
1923	568,924	15.00	8,582,000	54.84	0.45	3,861,000
Average.....1918-22	519,132	13.75	7,133,000	55.82	0.72	5,118,200

5.—Area, Yield, Quality and Value of Principal Field Crops in Canada, 1922-23 and Five-Year Average, 1918-22—con.

Field Crops.	Area.	Yield per acre.	Total yield.	Weight per measured bushel.	Average price per bushel.	Total value.
	acres.	bush.	bush.	lb.	\$	\$
Saskatchewan—con.						
Peas.....1922	2,302	22.50	51,800	60.60	2.00	103,600
1923	2,030	27.25	55,000	60.00	1.66	91,300
Average.....1918-22	3,292	18.75	61,880	60.25	2.50	155,120
Beans.....1922	2,199	12.75	28,000	60.00	2.50	70,000
1923	872	25.00	22,000	60.00	3.00	66,000
Average.....1918-22	1,328	13.50	18,080	60.00	3.59	64,960
Mixed grains.....1922	29,425	29.25	861,000	45.00	0.30	258,000
1923	29,494	32.00	944,000	49.10	0.30	283,000
Average.....1918-22	23,267	29.50	686,200	43.40	0.83	568,200
Flaxseed.....1922	466,177	8.75	4,079,000	55.94	1.71	6,975,000
1923	465,653	11.75	5,493,800	56.00	1.75	9,614,000
Average.....1918-22	760,970	5.75	4,341,800	54.70	2.46	10,685,200
Potatoes.....1922	55,600	cwt. 72.25	4,012,000	—	per cwt. 0.80	3,210,000
1923	47,368	92.25	4,370,000	—	0.83	3,632,000
Average.....1918-22	55,796	86.00	5,051,108	—	1.33	6,728,780
Turnips, mangolds, etc. 1922	8,666	112.25	973,000	—	0.98	953,000
1923	5,235	111.75	585,000	—	0.91	532,000
Average.....1918-22	10,135	120.50	1,221,930	—	1.76	2,147,200
Hay and clover.....1922	255,024	tons. 1.40	360,400	—	per ton. 8.00	2,883,000
1923	251,350	1.70	425,100	—	8.00	3,423,000
Average.....1918-22	269,738	1.25	355,180	—	11.40	4,048,760
Grain hay.....1923	3,886	2.50	9,700	—	8.00	77,600
Alfalfa.....1922	7,341	1.85	13,600	—	12.50	170,000
1923	6,032	2.65	16,000	—	8.00	128,000
Average.....1918-22	9,042	2.00	18,420	—	19.40	357,360
Fodder corn.....1922	38,645	4.85	187,000	—	7.00	1,309,000
1923	61,813	4.95	304,800	—	5.25	1,600,000
Average.....1918-22	19,199	6.75	131,100	—	9.69	1,269,720
Alberta—						
Fall wheat.....1922	64,554	bush. 13.00	839,000	60.50	per bush. 0.77	646,000
1923	84,260	28.00	2,359,000	60.00	0.65	1,534,000
Average.....1918-22	54,467	15.75	864,200	60.53	1.30	1,119,200
Spring wheat.....1922	5,701,041	11.25	64,137,000	60.58	0.77	49,385,000
1923	5,874,101	28.00	164,475,000	61.47	0.65	106,909,000
Average.....1918-22	4,573,228	11.25	51,097,400	60.74	1.32	67,520,200
All wheat.....1922	5,765,595	11.25	64,976,000	60.58	0.77	50,031,000
1923	5,958,361	28.00	166,834,000	61.44	0.65	108,443,000
Average.....1918-22	4,627,695	11.25	51,961,600	60.72	1.32	68,639,400
Oats.....1922	1,614,590	22.00	35,519,000	36.07	0.35	12,432,000
1923	2,299,546	50.00	114,977,000	38.08	0.24	27,595,000
Average.....1918-22	2,606,973	26.25	68,170,000	36.82	0.46	31,074,200
Barley.....1922	378,053	16.50	6,238,000	46.99	0.42	2,620,000
1923	383,553	38.5	14,774,000	48.39	0.33	4,889,000
Average.....1918-22	462,246	21.25	9,790,400	46.97	0.68	6,656,720
Fall rye.....1923	303,765	20.25	6,167,000	55.00	0.40	2,467,000
Spring rye.....1923	92,993	15.75	1,473,000	56.27	0.40	589,000
All rye.....1922	603,583	10.25	6,187,000	55.73	0.55	3,403,000
1923	396,758	19.25	7,640,000	55.59	0.40	3,056,000
Average.....1918-22	223,672	12.25	2,721,000	55.58	0.86	2,349,600
Peas.....1922	1,591	11.60	18,500	60.00	2.00	37,000
1923	3,306	22.00	73,000	61.00	1.41	103,000
Average.....1918-22	2,089	18.00	37,820	60.00	2.06	77,800

5.—Area, Yield, Quality and Value of Principal Field Crops in Canada, 1922-23 and
Five-Year Average, 1918-22—con.

Field Crops.	Area.	Yield per acre.	Total yield.	Weight per measured bushel.	Average price per bushel.	Total value.
	acres.	bush.	bush.	lb.	\$	\$
Alberta—con.						
Beans.....1922	100	14.25	1,400	60.00	2.00	2,800
1923	559	11.00	6,000	60.00	2.00	12,000
Average.....1918-22	839	16.25	13,540	60.00	4.28	57,960
Mixed grains.....1922	14,314	25.50	370,000	44.50	0.40	148,000
1923	11,228	41.75	469,000	44.25	0.24	113,000
Average.....1918-22	17,303	27.75	478,000	45.50	0.81	387,000
Flaxseed.....1922	22,186	4.00	88,700	54.79	1.52	135,000
1923	15,000	10.40	156,000	55.50	1.63	254,000
Average.....1918-22	66,186	5.00	337,540	55.64	2.43	820,400
Potatoes.....1922	42,502	65.75	2,791,000	—	0.83	2,317,000
1923	39,960	119.00	4,759,000	—	0.60	2,846,000
Average.....1918-22	45,395	82.75	3,755,192	—	1.27	4,765,940
Turnips, mangolds, etc..1922	9,289	86.75	806,000	—	0.60	484,000
1923	9,254	114.00	1,055,000	—	1.00	1,055,000
Average.....1918-22	10,959	102.25	1,121,670	—	1.53	1,714,460
Hay and clover.....1922	291,723	0.80	234,400	—	16.00	3,750,000
1923	245,178	1.65	402,000	—	6.00	2,410,000
Average.....1918-22	406,485	1.00	412,640	—	16.73	6,906,920
Grain hay ¹1922	1,220,000	1.25	1,525,000	—	12.00	18,300,000
1923	1,861,033	2.25	4,187,000	—	3.00	12,562,000
Alfalfa.....1922	26,539	2.20	58,400	—	15.00	876,000
1923	38,548	2.70	104,000	—	12.00	1,249,000
Average.....1918-22	24,457	2.00	49,460	—	19.75	975,980
Fodder corn.....1922	15,648	5.25	82,200	—	5.00	411,000
1923	53,953	4.65	251,000	—	3.00	753,000
Average.....1918-22	6,377	6.00	38,680	—	7.08	273,700
British Columbia—		bush.	bush.		per bush.	
Fall wheat.....1922	14,080	23.00	324,000	60.00	1.18	382,000
1923	14,139	25.25	357,000	60.38	1.16	414,000
Average.....1918-23	12,368	23.75	292,900	60.08	1.84	537,400
Spring wheat.....1922	32,324	22.00	711,000	61.17	1.24	882,000
1923	31,110	24.50	762,000	60.00	1.20	914,000
Average.....1918-22	31,481	21.75	687,900	59.98	1.88	1,292,860
All wheat.....1922	46,404	22.25	1,035,000	60.70	1.22	1,264,000
1923	45,249	24.75	1,119,000	60.14	1.19	1,328,000
Average.....1918-22	43,849	22.25	980,800	59.94	1.87	1,830,260
Oats.....1922	57,513	43.75	2,516,000	37.14	0.62	1,560,000
1923	61,048	51.50	3,144,000	34.92	0.62	1,949,000
Average.....1918-22	49,212	43.25	2,122,400	35.69	0.81	1,710,700
Barley.....1922	7,366	29.25	214,000	48.78	0.91	195,000
1923	6,648	33.50	223,000	48.75	0.82	183,000
Average.....1918-22	8,742	33.00	288,020	49.47	1.36	381,640
Rye.....1922	6,982	20.00	140,000	55.50	0.95	133,000
1923	7,833	22.00	172,000	54.33	1.00	172,000
Average.....1918-22	4,739	22.75	107,900	55.85	1.54	166,440
Peas... ..1922	2,214	25.75	57,000	60.00	2.08	119,000
1923	2,432	24.00	58,000	60.67	1.90	110,000
Average.....1918-22	2,376	24.25	57,840	59.49	2.60	149,800
Beans.....1922	1,122	20.00	22,400	60.00	2.40	54,000
1923	1,057	23.00	24,000	—	2.40	58,000
Average.....1918-22	1,656	19.00	31,640	60.13	3.65	115,080

¹ No average available.

5.—Area, Yield, Quality and Value of Principal Field Crops in Canada, 1922-23 and Five-Year Average, 1918-22—concluded.

Field Crops.	Area.	Yield per acre.	Total yield.	Weight per measured bushel.	Average price per bushel.	Total value.
	acres.	bush.	bush.	lb.	\$	\$
British Columbia—con.						
Mixed grains.....1922	5,009	31-00	155,000	45-00	0-70	109,000
1923	4,036	35-00	141,000	—	0-70	99,000
Average.....1918-22	4,562	32-50	148,020	45-33	1-01	150,200
Potatoes.....1922	19,187	cwt.	cwt.	—	per cwt.	
1923	18,102	120-00	2,302,200	—	1-17	2,694,000
Average.....1918-22	17,337	116-00	2,099,800	—	1-23	2,583,000
1918-22	17,337	112-00	1,943,244	—	1-60	3,095,060
Turnips, mangolds, etc..1922	7,347	200-00	1,469,000	—	0-76	1,116,000
1923	7,188	202-00	1,452,000	—	0-86	1,249,000
Average.....1918-22	6,941	198-50	1,377,590	—	1-30	1,774,780
Hay and clover.....1922	141,413	tons.	tons.	—	per ton.	
1923	146,640	1-65	233,000	—	27-25	6,349,000
Average.....1918-22	129,279	2-30	337,300	—	20-25	6,831,000
1918-22	129,279	2-00	241,840	—	30-25	7,321,520
Grain hay.....1922	56,626	1-75	99,100	—	26-34	2,610,000
1923	51,823	2-55	132,000	—	18-20	2,402,000
Average.....1918-22	53,808	2-25	135,500	—	27-00	3,662,000
Alfalfa.....1922	15,918	3-00	47,800	—	27-00	1,291,000
1923	17,420	3-10	54,000	—	18-75	1,013,000
Average.....1918-22	13,556	3-25	43,080	—	30-37	1,308,140
Fodder corn.....1922	4,715	11-00	51,900	—	15-00	779,000
1923	4,583	11-65	53,400	—	17-50	935,000
Average.....1918-22	4,111	10-85	44,640	—	14-44	644,400

Acreage under Pasture.—Table 6 gives the estimated acreage under pasture, by provinces, in Canada for the year 1923, as compared with the years 1919 to 1922.

6.—Estimated Acreage under Pasture in Canada, 1919-23.

Provinces.	1919.	1920.	1921.	1922.	1923.
	acres.	acres.	acres.	acres.	acres.
P. E. Island.....	233,982	247,360	250,098	241,598	237,576
Nova Scotia.....	1,177,099	1,075,827	955,030	935,916	816,934
New Brunswick.....	723,972	663,012	613,030	553,312	461,524
Quebec.....	3,893,777	3,869,696	4,016,725	3,630,678	3,602,472
Ontario.....	3,499,802	3,432,620	3,401,998	3,401,033	3,472,642
Manitoba.....	—	—	—	198,955	199,604
Saskatchewan.....	831,592	784,234	678,815	472,143	456,691
Alberta.....	—	—	—	202,356	196,239
British Columbia.....	61,220	61,942	61,508	58,577	90,193
Indian Reserves.....	—	—	—	—	33,268
Totals.....	10,421,444	10,134,691	9,977,204	9,694,568	9,567,143

Estimates are based upon returns collected in June of each year. For 1922 and 1923 they include all the provinces, and for the previous years all except Manitoba and Alberta. For 1923 the total includes the area under pasture in the Indian Reserves, *viz.*, 33,268 acres. In British Columbia the range pasture in 1923, not included in the table, is estimated at 1,232,763 acres, as compared with 1,216,764 acres in 1922, 891,249 acres in 1921 and 847,720 acres in 1920.

7.—Annual Average Yields per acre of Field Crops for Canada and by Provinces from 1916 to 1923, with Decennial Average for the years 1913-22.

Field Crops.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.	Ten-year average 1913-22.
Canada—	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.
Fall wheat.....	21-50	21-50	19-00	23-75	24-00	21-50	21-25	23-75	23-00
Spring wheat.....	16-75	15-50	10-75	9-50	14-00	12-75	17-75	20-75	15-50
All wheat.....	17-00	15-75	11-00	10-00	14-50	13-00	17-75	21-00	15-75
Oats.....	37-25	30-25	28-75	26-25	33-50	25-25	33-75	39-25	32-00
Barley.....	23-75	23-00	24-50	21-25	24-75	21-25	27-75	27-75	24-75
Rye.....	19-50	18-25	15-25	13-50	17-50	11-75	15-50	16-00	15-75
Peas.....	14-50	15-25	13-25	14-75	19-00	14-25	18-00	17-00	16-75
Beans.....	12-75	13-75	15-50	16-50	17-50	17-50	16-25	16-50	16-00
Buckwheat.....	17-50	18-00	20-75	23-50	23-75	22-75	22-50	22-25	21-75
Mixed grains.....	25-75	32-50	38-75	31-00	40-00	25-75	35-50	35-25	33-75
Flaxseed.....	12-50	6-50	5-75	5-00	5-60	7-75	8-85	11-30	8-65
Corn for husking.....	36-25	33-00	56-75	61-00	49-25	50-25	43-25	42-75	51-00
cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.
Potatoes.....	80-25	72-95	85-15	92-00	102-35	91-75	81-55	99-00	88-60
Turnips, etc.....	132-00	145-35	188-75	176-95	200-45	173-80	196-10	196-00	181-30
tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
Hay and clover.....	1-86	1-66	1-40	1-55	1-30	1-07	1-45	1-55	1-40
Fodder corn.....	6-65	7-34	9-50	9-75	9-60	10-75	9-00	8-10	9-30
Sugar beets.....	4-75	8-40	10-00	9-80	11-37	9-45	9-20	9-60	9-25
Alfalfa.....	2-91	2-39	2-25	2-20	2-45	2-50	2-65	2-65	2-45
Prince Edward Island	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.
Spring wheat.....	16-75	14-50	20-00	17-00	12-00	16-75	21-25	15-25	18-00
Oats.....	37-25	32-25	34-50	34-00	27-75	27-00	35-75	35-00	34-00
Barley.....	29-25	28-50	28-50	29-00	24-50	23-25	29-00	27-50	27-75
Peas.....	22-25	14-00	16-00	16-00	16-50	23-50	21-00	24-00	18-50
Buckwheat.....	27-25	29-00	21-75	20-75	23-50	24-75	27-25	28-75	25-25
Mixed grains.....	41-25	38-25	44-50	44-00	33-75	29-25	37-75	41-25	38-75
cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.
Potatoes.....	123-60	105-00	102-00	75-00	102-00	96-95	74-75	87-00	98-75
Turnips, etc.....	238-50	252-70	260-25	259-20	241-00	285-20	285-00	250-00	253-25
tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
Hay and clover.....	1-70	1-55	1-50	1-80	1-25	0-80	1-45	1-35	1-50
Fodder corn.....	13-00	7-00	5-25	12-00	8-00	10-00	7-50	5-65	9-40
Nova Scotia—	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.
Spring wheat.....	19-50	15-75	22-25	19-50	19-50	15-50	20-25	18-75	19-50
Oats.....	34-75	29-25	37-25	36-00	30-25	28-75	33-25	34-25	32-00
Barley.....	26-25	24-75	30-00	31-25	26-00	23-00	27-25	29-00	27-50
Rye.....	17-00	15-00	14-50	29-50	15-00	14-25	20-25	18-75	20-00
Peas.....	17-75	14-25	18-75	20-00	20-50	16-75	22-00	18-50	19-75
Beans.....	16-25	17-75	16-25	12-75	18-50	19-25	19-00	17-25	16-75
Buckwheat.....	24-50	21-00	23-00	25-25	22-25	20-50	24-00	23-75	23-50
Mixed grains.....	34-00	24-00	36-00	37-50	32-50	30-00	30-50	34-25	31-50
cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.
Potatoes.....	120-60	104-95	114-45	96-60	122-25	98-25	97-10	120-00	107-10
Turnips, etc.....	202-00	175-45	195-60	268-85	215-85	247-50	215-60	203-00	218-95
tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
Hay and clover.....	1-80	1-65	1-45	2-10	1-50	1-35	1-55	1-80	1-65
Fodder corn.....	8-75	9-20	9-50	9-50	8-00	6-50	7-55	10-00	8-45
Alfalfa.....	5-00	3-50	—	—	—	—	—	—	—
New Brunswick—	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.
Spring wheat.....	17-25	12-00	19-00	17-50	15-75	15-25	17-50	19-00	17-25
Oats.....	30-50	22-50	31-50	30-25	29-50	25-00	30-75	31-00	29-00
Barley.....	23-75	22-00	24-75	26-75	23-75	17-00	25-00	29-75	23-75
Peas.....	16-50	15-00	14-75	14-75	15-00	12-75	14-25	15-25	15-25
Beans.....	15-25	19-50	15-50	16-50	16-25	12-75	18-00	14-75	16-25
Buckwheat.....	22-75	19-50	20-75	25-00	22-75	22-25	25-00	25-00	23-50
Mixed grains.....	34-25	19-50	32-50	33-75	29-75	23-50	31-00	29-00	30-25
cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.
Potatoes.....	115-20	89-90	95-10	85-65	118-80	129-75	98-50	132-75	110-10
Turnips, etc.....	205-50	150-25	175-00	183-25	176-50	174-75	198-65	194-00	178-00
tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
Hay and clover.....	1-48	1-60	1-50	1-40	1-20	0-90	1-50	1-15	1-35
Fodder corn.....	10-00	9-00	4-50	5-00	8-00	7-00	7-50	10-00	6-50
Quebec—	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.
Spring wheat.....	15-00	14-00	17-25	16-75	17-00	15-25	15-75	16-00	16-25
Oats.....	22-75	21-75	27-25	26-75	30-25	21-25	27-75	26-75	26-75
Barley.....	20-00	18-50	24-00	22-75	25-25	21-25	22-75	23-25	23-00
Rye.....	14-25	16-75	16-25	17-25	18-75	17-25	15-50	15-00	18-75
Peas.....	14-00	12-00	15-50	15-00	17-00	14-75	14-25	15-25	15-00
Beans.....	17-75	15-00	17-00	19-75	18-00	18-75	17-00	18-75	17-50
Buckwheat.....	19-00	16-50	20-75	24-00	25-75	23-25	22-50	21-75	22-25

7.—Annual Average Yields per acre of Field Crops for Canada and by Provinces from 1916 to 1923, with Decennial Average for the years 1913-22—con.

Field Crops.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.	Ten-year average, 1913-22.
Quebec—con.	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.
Mixed grains.....	20-25	21-25	27-00	27-00	29-25	24-00	26-75	27-25	26-50
Flaxseed.....	10-50	8-25	11-25	9-75	11-50	11-50	10-00	8-65	10-50
Corn for husking.....	24-75	24-25	21-75	41-00	29-75	29-50	28-00	23-00	28-50
	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.
Potatoes.....	78-60	48-00	88-20	108-90	111-30	97-50	82-35	118-75	92-95
Turnips, etc.....	132-50	112-25	147-75	158-75	164-65	159-50	158-15	193-25	150-05
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
Hay and clover.....	1-75	1-71	1-50	1-50	1-25	0-95	1-35	1-45	1-35
Fodder corn.....	8-00	8-50	7-25	8-25	8-00	9-00	7-25	8-55	8-00
Alfalfa.....	2-65	2-26	2-25	2-35	2-40	2-20	1-50	2-15	2-15
Ontario—	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.
Fall wheat.....	21-25	21-50	19-50	24-30	24-30	22-00	21-90	23-10	23-25
Spring wheat.....	16-25	19-50	23-25	15-60	16-80	12-50	16-90	17-40	18-25
All wheat.....	20-75	21-25	21-25	21-20	22-50	20-10	21-25	22-40	22-25
Oats.....	25-50	36-50	45-00	29-30	44-90	23-40	38-20	34-90	35-75
Barley.....	23-00	31-00	36-75	23-10	34-40	22-00	32-20	29-90	30-00
Rye.....	17-50	17-75	16-00	15-80	17-70	14-50	16-40	16-30	16-75
Peas.....	14-25	16-75	21-00	14-30	20-20	13-60	19-70	17-30	17-00
Beans.....	11-75	11-75	13-75	12-60	16-70	16-10	15-60	15-40	14-75
Buckwheat.....	14-50	18-75	20-50	22-80	22-30	22-70	21-60	21-80	20-75
Mixed grains.....	26-00	37-75	44-25	31-40	44-20	26-20	38-50	36-80	36-25
Flaxseed.....	9-25	13-00	12-25	9-40	10-70	8-90	10-70	10-20	12-00
Corn for husking.....	37-25	37-25	66-75	68-60	53-00	54-00	46-50	45-00	54-75
	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.
Potatoes.....	36-60	80-20	69-95	57-75	92-00	56-30	70-65	69-75	69-35
Turnips, etc.....	105-50	170-45	230-15	173-75	242-15	175-65	222-60	207-00	193-85
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
Hay and clover.....	2-00	1-70	1-32	1-59	1-26	1-11	1-56	1-60	1-40
Fodder corn.....	6-50	7-54	10-35	10-05	10-39	11-44	10-06	8-90	9-90
Sugar beets.....	4-75	8-40	10-00	9-80	11-37	9-45	9-20	9-60	9-25
Alfalfa.....	3-00	2-74	2-28	2-14	2-45	2-58	2-84	2-65	2-50
Manitoba—	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.
Fall wheat.....	16-00	22-25	18-00	—	—	—	—	—	—
Spring wheat.....	11-00	16-75	16-25	14-25	13-90	11-15	19-25	11-25	16-00
All wheat.....	11-00	16-75	16-25	14-25	13-90	11-15	19-25	11-25	16-00
Oats.....	33-50	30-25	31-75	31-25	30-75	22-27	40-25	32-00	32-00
Barley.....	20-00	22-50	25-25	19-25	21-00	18-87	29-75	22-25	23-25
Rye.....	18-50	17-25	16-25	13-75	15-50	13-83	16-75	13-75	15-50
Mixed grains.....	32-25	31-00	28-25	25-00	21-25	19-85	30-00	22-50	25-50
Flaxseed.....	13-75	9-00	10-00	9-00	7-90	8-83	11-00	10-00	9-50
	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.
Potatoes.....	88-35	63-55	111-00	75-55	55-30	92-30	96-00	68-50	82-75
Turnips, etc.....	72-50	92-60	125-85	92-05	72-65	115-65	145-25	102-00	110-00
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
Hay and clover.....	1-83	1-00	1-00	1-50	1-50	1-55	1-75	1-50	1-45
Fodder corn.....	2-75	4-86	5-50	6-80	4-40	7-20	7-50	7-00	5-95
Alfalfa.....	2-75	2-07	2-25	2-20	2-00	2-59	2-60	2-50	2-25
Saskatchewan—	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.
Spring wheat.....	16-25	14-25	10-00	8-50	11-25	13-75	20-25	19-75	15-25
Oats.....	43-00	27-25	21-50	23-10	27-70	30-00	35-25	44-50	31-00
Barley.....	27-00	21-00	17-00	13-20	20-25	26-75	29-00	30-00	23-25
Rye.....	24-00	18-75	11-50	10-50	14-70	11-25	18-00	15-00	16-50
Peas.....	32-50	17-25	20-00	13-00	14-50	19-25	22-50	27-25	19-50
Mixed grains.....	35-00	32-00	21-00	35-00	33-50	30-00	29-25	32-00	30-50
Flaxseed.....	12-25	6-25	5-00	4-80	5-00	7-50	8-75	11-75	8-50
	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.
Potatoes.....	93-45	79-85	69-75	102-00	76-50	105-90	72-25	92-25	80-90
Turnips, etc.....	126-50	77-75	112-85	128-85	150-50	84-75	112-25	111-75	141-45
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
Hay and clover.....	2-35	1-42	1-15	1-05	1-40	1-60	1-40	1-70	1-40
Fodder corn.....	2-60	2-00	5-65	12-50	3-75	11-35	4-85	4-95	6-00
Alfalfa.....	2-85	1-61	1-40	1-60	2-25	3-00	1-85	2-65	2-00
Alberta—	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.
Fall wheat.....	30-25	20-50	15-00	15-75	18-75	17-25	13-00	28-00	20-50
Spring wheat.....	25-00	18-25	6-00	8-00	20-50	10-25	11-25	28-00	15-00
All wheat.....	25-00	18-25	6-00	8-00	20-50	10-35	11-25	28-00	15-10
Oats.....	48-00	34-00	22-75	23-75	37-25	22-00	22-00	50-00	32-75
Barley.....	29-00	22-00	16-50	25-50	26-50	20-50	16-50	38-50	23-75
Rye.....	24-50	20-50	17-25	14-00	21-25	9-00	10-25	19-25	13-00
Peas.....	20-00	17-50	18-00	18-00	17-00	24-00	11-60	22-00	18-00
Mixed grains.....	30-00	25-75	21-50	36-25	30-00	22-75	25-50	41-75	27-75
Flaxseed.....	13-75	7-00	5-00	2-75	7-00	6-00	4-00	10-40	8-00

7.—Annual Average Yields per acre of Field Crops for Canada and by Provinces from 1916 to 1923, with Decennial Average for the years 1913-22—concluded.

Field Crops.	1916.	1917.	1918.	1919.	1920 .	1921.	1922.	1923.	Ten-year average, 1913-22.
Alberta—con.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.
Potatoes.....	98.25	90.85	42.30	107.85	99.60	95.10	65.75	119.00	86.35
Turnips, etc.....	139.75	103.75	94.25	110.75	130.85	76.75	86.75	114.00	106.60
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
Hay and clover.....	1.93	1.48	0.85	1.10	1.30	1.00	0.80	1.65	1.30
Fodder corn.....	2.56	1.00	5.50	5.58	4.25	10.00	5.25	4.65	5.30
Alfalfa.....	2.65	2.05	2.00	2.00	2.25	1.75	2.20	2.70	2.15
British Columbia—	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.	bush.
Fall wheat.....	30.75	31.75	24.75	24.75	19.25	27.25	23.00	25.25	26.25
Spring wheat.....	31.00	28.50	22.00	22.00	18.75	24.50	22.00	24.50	23.75
All wheat.....	31.00	29.00	22.50	22.75	19.00	25.25	22.25	24.75	24.50
Oats.....	60.50	53.75	39.75	47.25	34.75	48.75	43.75	51.50	51.00
Barley.....	45.75	29.25	26.50	33.00	37.75	34.75	29.25	33.50	33.50
Peas.....	33.75	23.75	21.50	23.00	26.00	25.00	25.75	24.00	26.00
Mixed grains.....	50.00	40.00	21.50	36.50	36.00	34.00	31.00	35.00	38.50
	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.
Potatoes.....	113.40	99.90	136.80	102.00	99.00	105.60	120.00	116.00	115.50
Turnips, etc.....	250.00	172.35	211.00	182.50	217.50	183.00	200.00	202.00	208.90
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
Hay and clover.....	2.67	1.85	1.90	1.50	2.00	2.30	1.65	2.30	2.10
Fodder corn.....	10.00	7.00	10.10	11.50	11.50	9.85	11.00	11.65	10.40
Alfalfa.....	2.88	2.58	3.25	3.00	3.00	3.70	3.00	3.10	3.25

Grain Yields of the Prairie Provinces.—Final figures of the acreage and yield of the grain crops of the three Prairie Provinces (Manitoba, Saskatchewan and Alberta) are given in Table 8, together with comparative data for 1921 and 1922.

8.—Areas and Yields of Wheat, Oats, Barley, Rye and Flaxseed in the three Prairie Provinces, 1921-23.

Provinces.	1921.	1922.	1923.	1921.	1922.	1923.
	acres.	acres.	acres.	bush.	bush.	bush.
Prairie Provinces—						
Wheat.....	22,181,329	21,223,448	21,665,276	280,098,000	375,194,000	452,260,000
Oats.....	10,819,641	8,564,212	9,032,821	284,147,500	289,660,000	391,756,000
Barley.....	2,109,065	1,983,292	2,180,472	44,681,600	53,612,000	59,778,200
Rye.....	1,688,228	1,926,117	1,803,210	19,109,700	29,429,000	20,842,000
Flaxseed.....	516,972	555,043	620,172	3,945,700	4,901,700	7,044,800
Manitoba—						
Wheat.....	3,501,217	3,125,556	2,915,915	39,054,000	60,051,000	32,804,000
Oats.....	2,226,376	1,851,608	1,834,504	49,442,500	74,433,000	58,704,000
Barley.....	1,043,144	968,783	1,156,212	19,681,600	28,863,000	25,726,000
Rye.....	497,730	421,603	337,528	3,564,700	7,078,000	4,620,000
Flaxseed.....	257,793	421,603	337,528	3,564,700	7,078,000	4,620,000
Saskatchewan—						
Wheat.....	13,556,708	12,332,297	12,791,000	138,000,000	250,167,000	252,622,000
Oats.....	5,681,522	5,098,104	4,898,771	170,513,000	179,708,000	218,075,000
Barley.....	497,730	636,456	640,402	13,343,000	18,511,000	19,278,200
Rye.....	1,208,299	900,931	568,924	13,546,000	16,164,000	8,582,000
Flaxseed.....	426,849	466,177	465,653	3,230,000	4,079,000	5,493,800
Alberta—						
Wheat.....	5,123,404	5,765,565	5,958,361	53,044,000	64,976,000	166,834,000
Oats.....	2,911,743	1,614,500	2,299,546	64,192,000	35,519,000	114,977,000
Barley.....	568,191	378,053	383,858	11,657,000	6,238,000	14,774,000
Rye.....	222,136	603,583	396,758	1,999,000	6,187,000	7,640,000
Flaxseed.....	28,434	22,186	15,000	171,000	88,700	156,000

Quality of Grain Crops, 1913-1923.—Table 9 gives for Canada the average weight per measured bushel for each of the principal grain crops from 1913 to 1923, with the ten-year average for the period 1913-22.

9.—Quality of Grain Crops as Indicated by Average Weight per measured bushel, 1913-23.

Crops.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.	Ten-year average, 1913-22.
	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
Fall wheat.....	60.25	59.61	59.71	59.52	59.37	61.19	61.20	60.14	58.77	59.91	60.23	59.97
Spring wheat.....	60.37	59.46	60.31	56.51	59.48	58.69	58.53	59.07	58.10	60.31	58.55	59.08
All wheat.....	60.34	59.49	60.19	57.10	59.46	59.44	59.12	59.35	58.11	60.24	58.80	59.28
Oats.....	36.48	35.31	36.61	33.86	33.55	35.61	34.16	35.62	32.97	35.68	35.55	34.99
Barley.....	48.41	47.22	48.26	45.66	46.97	47.24	46.32	47.62	46.05	47.66	47.19	47.14
Rye.....	55.66	55.47	56.32	54.95	53.44	55.60	55.09	55.44	55.06	55.71	54.61	55.27
Peas.....	60.00	60.53	60.74	59.88	59.81	59.93	59.60	60.44	59.42	60.08	60.00	60.04
Beans.....	59.70	60.21	59.61	60.00	59.70	58.67	59.99	59.73	59.30	59.39	59.09	59.63
Buckwheat.....	50.32	48.20	48.02	46.35	46.49	47.41	47.23	47.95	47.35	47.80	47.80	47.71
Mixed grains.....	44.74	45.51	44.98	43.13	44.41	46.39	44.83	44.65	41.62	44.33	44.19	44.46
Flaxseed.....	55.79	52.49	55.28	54.99	54.73	53.72	55.14	54.79	54.34	55.04	54.63	54.63
Corn for husking....	56.27	56.62	56.32	56.51	56.18	53.97	—	56.45	55.56	55.45	55.29	55.93

The table shows that in 1923 fall wheat, 60.23 lb., was superior to that of 1922, 59.91 lb., and to the ten-year average of 59.97 lb. During the eleven-year period the weight has been above average for five years and below it for six years. For spring wheat, 58.55 lb., the weight is below that of the previous year, 60.31 lb., and also below the average of 59.08 lb. The weight has been above the average for five years and below it for six years. For all wheat the weight in 1923, 58.80 lb., is also below both that of 1922 and that of the average. It has been above average in seven years and below it four years. Oats, 35.55 lb., are below 1922, 35.68 lb., but above the average of 34.99 lb. They are above average in seven years and below it in four years. Barley, 47.19 lb., compares with 47.66 lb. in 1922, and with 47.14 lb., the average. It is above average in seven years and below it in four years. For the remaining crops the decennial averages are as follows, the number of times the average was exceeded being placed within brackets: rye 55.27 lb., (6); peas 60.04 lb., (4); beans 59.63 lb., (6); buckwheat 47.71 lb., (6); mixed grains 44.46 lb., (6); flax 54.63 lb., (7); corn for husking 55.93, (6).

Stocks of Grain in Canada.—Table 10 shows the quantities of grain in farmers' hands at the close of the Canadian crop year on August 31, 1924, with comparative figures for the two previous years, as compiled from the estimates of crop correspondents. Adding the stocks in the elevators and flour mills, Table 11 shows the total quantities of grain in store at the close of each of the crop years 1922, 1923 and 1924.

10.—Stocks of Grain in Farmers' Hands on August 31, 1922, 1923 and 1924.

Field Crops.	Total production in 1921.	In farmers' hands, Aug. 31, 1922.		Total production in 1922.	In farmers' hands, Aug. 31, 1923.		Total production in 1923.	In farmers' hands, Aug. 31, 1924.	
	000 bush.	p.c.	bush.	000 bush.	p.c.	bush.	000 bush.	p.c.	bush.
Canada—									
Wheat.....	300,858	0.78	2,360,300	399,786	0.36	1,440,900	474,199	1.06	5,035,100
Barley.....	59,709	1.09	645,200	71,865	1.64	1,176,900	76,998	1.63	1,257,900
Oats.....	426,233	2.72	11,613,000	491,239	3.42	16,788,000	563,997	5.51	31,080,000
Rye.....	21,455	0.37	78,500	32,373	0.34	110,200	23,232	1.80	417,100
Flaxseed.....	4,112	0.15	6,300	5,009	0.05	2,800	7,140	0.18	12,700

11.—Stocks of Grain in Canada on August 31, 1922, 1923 and 1924.

Quantities in	Wheat.			Barley.		
	1922.	1923.	1924.	1922.	1923.	1924.
	bush.	bush.	bush.	bush.	bush.	bush.
Farmers' hands.....	2,360,300	1,440,900	5,035,100	645,200	1,176,900	1,257,900
Country Elevators in West..	4,657,202	2,376,734	2,839,631	768,951	434,658	432,557
Terminal Elevators in West- ern Inspection Division....	4,683,435	1,614,911	7,658,406	403,977	305,999	271,613
Public Elevators in the East	1,683,700	1,059,272	7,008,752	92,339	930,457	265,423
Flour mills (estimated).....	2,628,336	2,440,301	3,725,076	22,548	32,314	107,461
Transit by rail.....	4,578,027	2,758,178	1,816,050	253,499	479,662	207,074
Totals.....	20,591,000	11,690,296	28,083,015	2,186,514	3,359,990	2,542,278
	Oats.			Rye.		
	1922.	1923.	1924.	1922.	1923.	1924.
	bush.	bush.	bush.	bush.	bush.	bush.
Farmers' hands.....	11,613,000	16,788,000	31,080,000	78,500	110,200	417,100
Country Elevators in West..	1,461,009	1,418,017	3,090,108	753,030	288,574	330,629
Terminal Elevators.....	872,179	697,090	5,338,944	788,779	1,003,738	1,711,825
Public Elevators.....	1,089,189	1,468,696	4,642,518	8,160	1,226,236	140,041
Flour mills.....	238,196	607,014	1,443,756	1,219	1,980	4,805
Transit by rail.....	334,471	639,679	1,260,328	975,593	678,597	80,680
Totals.....	15,608,044	21,618,496	46,855,654	2,605,281	3,309,325	2,685,080
	Flaxseed.					
	1922.	1923.	1924.	1922.	1923.	1924.
	bush.	bush.	bush.	bush.	bush.	bush.
Farmers' hands.....	6,300	2,800	12,700			
Country Elevators in West..	89,620	38,416	39,332			
Terminal Elevators.....	190,924	151,329	113,646			
Public Elevators.....	14,484	—	49,303			
Transit by rail.....	9,354	10,545	36,168			
Totals.....	310,682	203,090	251,149			

At the close of the crop year, August 31, 1924, about 28,000,000 bushels of wheat, 2,540,000 bushels of barley, 46,856,000 bushels of oats, 2,685,000 bushels of rye and 251,000 bushels of flaxseed constituted the stocks remaining in Canada. For wheat and oats the quantities are considerably larger than they were at the end of August, 1923, this being due to the excellent harvest of 1923.

Table 12 gives the results of inquiries as to the quantities of wheat, and wheat flour expressed as wheat, in Canada on March 31, 1924, with the corresponding figures for 1920 to 1923.

12.—Stocks of Wheat in Canada, March 31, 1920-24.

Wheat in	March 31, 1920.	March 31, 1921.	March 31, 1922.	March 31, 1923.	March 31, 1924.
	bush.	bush.	bush.	bush.	bush.
Elevators.....	30,622,398	35,802,362	58,338,581	69,620,269	111,589,019
Flour mills.....	5,575,253	2,635,818	4,000,000	7,000,000	6,000,000
Transit by rail.....	6,271,697	7,119,983	10,998,505	8,396,782	14,149,019
Farmers' hands.....	34,837,000	48,919,000	41,649,000	54,771,000	70,755,000
Totals.....	77,306,348	95,477,163	114,986,086	139,788,051	202,493,038

Table 13 gives for oats, barley and flaxseed the stocks in Canada on March 31, 1924, as compared with the corresponding date of the previous year.

13.—Stocks in Canada of Oats, Barley and Flaxseed, March 31, 1923 and 1924.

Grain in	Oats.		Barley.		Flaxseed.	
	March 31, 1923.	March 31, 1924.	March 31, 1923.	March 31, 1924.	March 31, 1923.	March 31, 1924.
	bush.	bush.	bush.	bush.	bush.	bush.
Elevators.....	16,899,256	31,312,455	7,269,234	5,260,842	808,150	1,755,026
Flour mills.....	900,000	1,100,000	70,000	130,000	—	—
Transit by rail.....	2,755,299	2,740,933	254,096	3,235,692	96,829	112,739
Farmers' hands.....	171,163,000	248,363,000	17,836,000	21,492,000	837,000	2,397,400
Totals.....	191,717,555	283,516,388	25,429,330	30,118,534	1,741,979	4,265,165

Distribution of Wheat and Oat Crops.—The distribution of the wheat crop of Canada for each of the two years ended Aug. 31, 1923 and 1924, is calculated in Table 14.

14.—Distribution of the Canadian Wheat Crops of 1922 and 1923.

Items.	Crop year ended Aug 31, 1923.	Crop year ended Aug 31, 1924.	Items.	Crop year ended Aug 31, 1923.	Crop year ended Aug 31, 1924.
	000 bush.	000 bush.		000 bush.	000 bush.
Carry over Sept. 1, 1922-23	16,013	8,932	Exports as grain.....	229,632	289,190
Gross production.....	399,786	474,199	Exports as flour.....	49,811	53,959
Loss in cleaning.....	11,994	11,428	Total exports.....	279,493	343,149
Grain not merchantable....	9,799	14,726	Retained for seed.....	39,782	40,000
Net production.....	377,993	448,045	Milled for food.....	40,865	40,444
Imports.....	417	423	Carried over, August 31, 1923-24.....	8,932	26,267
Available for distribution.	394,423	457,400	Unaccounted for.....	+25,351	17,540

NOTE.—Flour is expressed as wheat on the basis of 1 barrel of flour, weighing 196 lb., being equal to 4½ bushels of wheat. For similar calculations extending over a series of years both for wheat and oats, see the Year Book of 1920, pp. 263-266 and the Monthly Bulletin of Agricultural Statistics for April, 1920 (Vol. 13, No. 140), p. 75, April 1922 (Vol. 15, No. 164), p. 127, April, 1923 (Vol. 16, No. 176), p. 134, and April, 1924 (Vol. 17, No. 188), p. 129.

Table 15 presents similar data in respect of oats. The bulk of this crop is consumed as food for live stock, and the table shows approximately how the remaining portion of the crop is disposed of, including the quantities exported as grain, oatmeal and rolled oats, the quantity retained for seed and the quantity milled for home consumption, representing chiefly oatmeal and rolled oats used for human food. The carry-over represents grain in the elevators, in farmers' hands, in transit, etc., and the balance is the quantity consumed in Canada for feeding to live stock, the amount being estimated at 380,017,000 bushels in 1923 and 481,262,000 bushels in 1924.

15.—Distribution of the Canadian Oat Crops of 1922 and 1923.

Items.	Crop year ended Aug 31, 1923.	Crop year ended Aug 31, 1924.	Items.	Crop year ended Aug 31, 1923.	Crop year ended Aug 31, 1924.
	000 bush.	000 bush.		000 bush.	000 bush.
Carry over, Sept. 1, 1922-23	15,274	20,979	Exports as grain.....	23,561	37,625
Gross production.....	491,239	563,997	Exports as meal, etc.....	2,344	5,245
Grain not merchantable....	38,670	28,230	Total exports.....	25,905	42,870
Net production.....	452,569	592,227	Retained for seed.....	34,325	36,201
Imports.....	414	185	Milled for home consumption.....	7,031	7,463
Available for distribution..	468,257	613,391	Carry over, August 31, 1923-24.....	20,797	45,595
			Balance for home consumption as grain.....	380,017	481,262

Per Capita Consumption of Wheat in Canada.—It is calculated that for the period of ten years ended August 31, 1919, the average per capita consumption of wheat was 5·8 bushels per annum, that during the four years of war (1915-18) the rate was 4·2 bushels, and that during the five-year pre-war period from 1910 to 1914 it was 7·7 bushels. These rates represent the gross per capita consumption, after accounting for the whole of the production in the way of losses due to cleaning and unmerchantable grain, adding the imports and deducting exports and grain retained for seed. During recent years the Dominion Bureau of Statistics has perfected arrangements for the periodical collection of statistics of wheat milled in Canada. These indicate on the basis of three years' returns that the per capita consumption of wheat is 5·4 bushels, a figure only 0·4 bushels below that of 5·8 bushels, the average given above for the ten-year period ended August 31, 1919. A report on the Flour Milling Industry of Canada for 1921, issued in March, 1923, by the Industrial Census Division of the Bureau, placed the per capita consumption of wheat flour in Canada for the calendar year 1921 at 0·92 barrels, representing, at 4·5 bushels to the barrel, 4·3 bushels. According to the quantity shown in Table 14 as milled in the crop year ended August 31, 1924, viz., 40,444,000 bushels, the per capita consumption is 4·4 bushels, an excess difference of only 0·1 bushel. The rate shown by the Industrial Census Division applies, however, only to a single year. The rate for the ten years, 1910 to 1919, represents moreover calculations that are gross rather than net. Altogether the conclusion appears to be justified that the average annual per capita consumption of wheat in Canada is between $4\frac{1}{2}$ and 5 bushels.

3.—Farm Live Stock and Poultry.

Numbers of Farm Animals.—In Table 16 are given by provinces the numbers of each description of farm live stock in Canada for the year 1923, as compared with 1922.¹ The numbers for the whole of the Dominion are estimated as follows, the corresponding numbers for 1922 being given within parentheses: horses 3,530,641 (3,648,871); mules 8,722 (9,202); cattle 9,246,231 (9,719,869); sheep 2,753,860 (3,263,525); swine 4,405,316 (3,915,684); poultry 45,469,292 (42,930,562); rabbits in British Columbia 48,359 (51,623). Thus all descriptions of farm live stock show a decrease in 1923, excepting swine and poultry which have increased. Horses and sheep show a decrease in every province except British Columbia. Cattle have increased only in Ontario and British Columbia. Swine show a decrease in Nova Scotia and New Brunswick, but an increase in every other province. Poultry show an increase in Ontario, Saskatchewan, Alberta and British Columbia, but a decrease in the Atlantic Provinces, Quebec and Manitoba. For all Canada, the different descriptions of farm poultry are as follows, last year's figures being given within parentheses: hens 41,356,119 (39,434,837); turkeys 2,105,483 (1,590,281); geese 961,203 (947,269); ducks 1,046,487 (958,139).

¹Statistics of the number and value of the various descriptions of farm live stock, collected at the decennial censuses since 1871, will be found in the "Statistical Summary of the Progress of Canada," immediately following the Table of Contents.

16.—Numbers of Farm Live Stock in Canada, by Provinces, 1922 and 1923.

CLASSIFICATION.—**Horses:** Stallions, Mares and Geldings, 2 years old and over; Colts and Fillies, under 2 years. **Cattle:** Bulls for breeding; Milch Cows; Calves, under 1 year; Steers, 2 years old and over; All other cattle.

Provinces.	1922.	1923.	Provinces.	1922.	1923.
No.	No.	No.	No.	No.	No.
Canada—			P. E. Island—con.		
Horses—			Poultry—		
Stallions.....	46,682	39,156	Hens.....	781,745	760,364
Mares.....	1,689,519	1,653,685	Turkeys.....	12,751	12,284
Geldings.....	1,514,159	1,498,750	Geese.....	34,882	33,354
Colts and fillies.....	398,511	339,050	Ducks.....	16,295	21,448
Total.....	3,648,871	3,530,641	Total.....	845,673	827,450
Mules.....	9,202	8,722	Nova Scotia—		
Cattle—			Horses—		
Bulls.....	278,570	261,144	Stallions.....	1,124	1,030
Milch cows.....	3,745,804	3,659,365	Mares.....	31,599	27,102
Calves.....	2,170,152	2,042,227	Geldings.....	23,425	19,577
Steers.....	803,900	733,816	Colts and fillies.....	2,766	2,084
Other cattle.....	2,721,443	2,549,079	Total.....	58,914	49,793
Total.....	9,719,869	9,246,231	Cattle—		
Sheep.....	1,824,851	1,505,328	Bulls.....	4,750	4,519
Lambs.....	1,438,674	1,248,532	Milch cows.....	144,937	129,161
Total.....	3,263,525	2,753,860	Calves.....	59,486	50,610
Swine—			Steers.....	34,589	26,933
Brood sows.....	569,176	626,133	Other cattle.....	75,940	59,825
All other pigs.....	3,346,508	3,779,183	Total.....	319,702	271,048
Total.....	3,915,684	4,405,316	Sheep.....	185,987	140,479
Poultry—			Lambs.....	143,358	118,058
Hens.....	39,434,873	41,356,119	Total.....	329,345	258,537
Turkeys.....	1,590,281	2,105,483	Swine—		
Geese.....	947,269	961,203	Brood sows.....	7,294	7,203
Ducks.....	958,139	1,046,487	All other pigs.....	40,210	36,831
Total.....	42,930,562	45,469,292	Total.....	47,504	44,034
Rabbits (B.C. only).....	51,623	48,359	Poultry—		
P. E. Island—			Hens.....	910,205	808,321
Horses—			Turkeys.....	9,519	7,775
Stallions.....	67	45	Geese.....	17,311	12,979
Mares.....	16,875	16,536	Ducks.....	12,770	22,810
Geldings.....	12,622	12,723	Total.....	949,805	851,885
Colts and fillies.....	3,266	3,010	New Brunswick—		
Total.....	32,830	32,314	Horses—		
Cattle—			Stallions.....	3,324	1,783
Bulls.....	2,744	2,476	Mares.....	35,810	26,171
Milch cows.....	51,613	50,465	Geldings.....	27,307	20,255
Calves.....	24,062	20,957	Colts and fillies.....	3,711	2,435
Steers.....	5,544	5,050	Total.....	70,152	50,644
Other cattle.....	59,979	51,630	Cattle—		
Total.....	143,942	130,578	Bulls.....	9,440	7,119
Sheep.....	59,244	46,781	Milch cows.....	146,054	106,076
Lambs.....	46,459	37,152	Calves.....	61,874	43,955
Total.....	105,703	83,933	Steers.....	25,934	12,345
wine—			Other cattle.....	59,813	43,406
Brood sows.....	5,125	6,450	Total.....	303,115	212,901
All other pigs.....	32,226	35,561	Sheep.....	127,886	87,441
Total.....	37,351	42,011	Lambs.....	108,145	70,367
			Total.....	236,031	157,808

16.—Numbers of Farm Live Stock in Canada, by Provinces, 1922 and 1923—con.

Provinces.	1922.	1923.	Provinces.	1922.	1923.
No.	No.	No.	No.	No.	No.
New Brunswick—con.			Ontario—con.		
Swine—			Swine—		
Brood sows.....	19,180	14,054	Brood sows.....	198,871	224,511
All other pigs.....	66,080	52,128	All other pigs.....	1,354,563	1,510,223
Total.....	85,260	66,182	Total.....	1,553,434	1,734,734
Poultry—			Poultry—		
Hens.....	1,168,619	852,779	Hens.....	12,740,844	13,921,724
Turkeys.....	44,282	38,170	Turkeys.....	336,447	364,425
Geese.....	25,057	16,936	Geese.....	446,487	467,749
Ducks.....	13,538	9,950	Ducks.....	440,539	449,486
Total.....	1,251,496	917,835	Total.....	13,964,317	15,203,384
Quebec—			Manitoba—		
Horses—			Horses—		
Stallions.....	7,883	4,167	Stallions.....	5,020	5,073
Mares.....	177,308	165,379	Mares.....	173,590	171,438
Geldings.....	155,423	152,663	Geldings.....	154,389	149,747
Colts and fillies.....	27,976	19,442	Colts and fillies.....	41,633	36,149
Total.....	368,590	341,651	Total.....	374,632	362,407
Cattle—			Cattle—		
Bulls.....	99,924	91,876	Bulls.....	17,708	16,386
Milch cows.....	1,006,992	968,705	Milch cows.....	252,245	253,715
Calves.....	384,561	358,823	Calves.....	173,324	164,240
Steers.....	49,248	45,683	Steers.....	75,810	60,153
Other cattle.....	317,665	316,664	Other cattle.....	221,653	197,217
Total.....	1,858,390	1,781,751	Total.....	740,740	691,711
Sheep.....	567,095	463,538	Sheep.....	61,539	51,010
Lambs.....	423,823	359,459	Lambs.....	51,324	42,152
Total.....	990,918	822,997	Total.....	112,863	93,162
Swine—			Swine—		
Brood sows.....	105,687	110,434	Brood sows.....	34,976	47,557
All other pigs.....	623,239	687,292	All other pigs.....	200,238	243,679
Total.....	728,926	797,726	Total.....	235,214	291,236
Poultry—			Poultry—		
Hens.....	6,117,723	6,096,680	Hens.....	3,250,990	2,959,221
Turkeys.....	206,659	208,549	Turkeys.....	210,709	200,118
Geese.....	125,247	114,286	Geese.....	73,833	58,836
Ducks.....	68,673	62,741	Ducks.....	76,576	70,876
Total.....	6,518,302	6,482,256	Total.....	3,612,108	3,289,051
Ontario—			Saskatchewan—		
Horses—			Horses—		
Stallions.....	3,569	3,562	Stallions.....	13,892	13,519
Mares.....	350,998	348,266	Mares.....	508,416	509,562
Geldings.....	272,442	268,381	Geldings.....	489,162	497,425
Colts and fillies.....	58,843	53,162	Colts and fillies.....	132,032	116,795
Total.....	685,852	673,371	Total.....	1,143,502	1,137,301
Cattle—			Mules.....	8,907	8,574
Bulls.....	69,077	69,308	Cattle—		
Milch cows.....	1,235,665	1,265,965	Bulls.....	33,423	33,325
Calves.....	626,353	626,553	Milch cows.....	456,006	403,813
Steers.....	234,049	225,559	Calves.....	398,240	376,469
Other cattle.....	671,037	650,702	Steers.....	173,668	204,840
Total.....	2,836,181	2,838,087	Other cattle.....	541,449	516,640
Sheep.....	501,319	464,549	Total.....	1,602,786	1,535,087
Lambs.....	485,298	443,124			
Total.....	986,617	907,673			

16.—Numbers of Farm Live Stock in Canada, by Provinces, 1922 and 1923—concluded.

Provinces.	1922.	1923.	Provinces.	1922.	1923.
No.	No.	No.	No.	No.	No.
Saskatchewan—con.			Alberta—con.		
Sheep.....	127,598	79,483	Poultry—		
Lambs.....	64,339	57,757	Hens.....	4,908,543	5,857,560
Total.....	191,937	137,240	Turkeys.....	337,336	580,510
Swine—			Geese.....	89,724	93,638
Brood sows.....	88,284	102,712	Ducks.....	86,536	98,455
All other pigs.....	474,785	577,155	Total.....	5,422,139	6,630,163
Total.....	563,069	679,867	British Columbia—		
Poultry—			Horses—		
Hens.....	7,705,102	7,996,868	Stallions.....	794	773
Turkeys.....	419,063	675,303	Mares.....	22,268	23,940
Geese.....	121,530	148,208	Geldings.....	21,320	22,980
Ducks.....	210,255	281,373	Colts and fillies.....	6,701	6,324
Total.....	8,455,950	9,101,752	Total.....	51,083	54,017
Alberta—			Mules.....	295	148
Horses—			Cattle—		
Stallions.....	11,009	9,204	Bulls.....	5,210	5,196
Mares.....	372,655	365,291	Milch cows.....	60,255	71,223
Geldings.....	358,069	354,999	Calves.....	48,750	48,150
Colts and fillies.....	121,583	99,649	Steers.....	147,756	139,575
Total.....	863,316	829,143	Other cattle.....	147,756	139,575
Cattle—			Total.....	261,971	264,144
Bulls.....	36,294	30,939	Sheep.....	28,171	28,530
Milch cows.....	392,037	410,242	Lambs.....	21,574	24,806
Calves.....	393,502	352,470	Total.....	49,745	53,336
Steers.....	205,058	153,253	Swine—		
Other cattle.....	626,151	574,020	Brood sows.....	6,838	6,944
Total.....	1,653,042	1,520,924	All other pigs.....	34,900	35,901
Sheep.....	166,012	143,517	Total.....	41,738	42,845
Lambs.....	94,354	95,657	Poultry—		
Total.....	260,366	239,174	Hens.....	1,851,102	2,102,602
Swine—			Turkeys.....	13,515	18,349
Brood sows.....	102,921	106,268	Geese.....	13,198	15,217
All other pigs.....	520,267	600,413	Ducks.....	32,957	29,348
Total.....	623,188	706,681	Total.....	1,910,772	2,165,516
			Rabbits.....	51,623	48,359

Table 17 gives in summary form the numbers of farm live stock, including poultry, for Canada and by provinces, for the years 1918 to 1923.

17.—Estimated Numbers of Farm Live Stock in Canada, 1918-1923.

Live Stock.	1918.	1919.	1920.	1921.	1922.	1923.
No.	No.	No.	No.	No.	No.	No.
Canada—						
Horses.....	3,609,257	3,667,369	3,400,352	3,813,921	3,648,871	3,530,641
Milch cows.....	3,538,600	3,548,437	3,504,692	3,737,832	3,745,804	3,659,365
Other cattle.....	6,507,267	6,536,574	6,067,504	6,469,273	5,974,065	5,886,866
Total cattle.....	10,045,867	10,085,011	9,572,196	10,207,105	9,719,869	9,246,231
Sheep.....	3,052,748	3,421,958	3,720,783	3,675,857	3,263,525	2,753,860
Swine.....	4,289,682	4,040,070	3,516,587	3,854,895	3,915,684	4,405,316
Turkeys.....	1,061,982	839,711	791,766	1,199,494	1,590,281	2,105,483
Geese.....	879,177	802,869	754,455	883,690	947,269	961,203
Ducks.....	884,034	777,692	617,638	762,135	958,139	1,046,487
Other fowls.....	31,334,498	31,785,722	25,942,105	34,340,474	39,434,873	41,356,119
Total poultry.....	34,159,691	34,645,238	30,505,819	37,185,793	42,930,562	45,469,292

Not including Alberta.

17.—Estimated Numbers of Farm Live Stock in Canada, 1918-1923—con.

Live Stock.	1918.	1919.	1920.	1921.	1922.	1923.
No.	No.	No.	No.	No.	No.	No.
P.E. Island—						
Horses.....	32,620	34,576	35,569	31,311	32,830	32,314
Milch cows.....	41,429	45,662	49,932	55,022	61,613	50,465
Other cattle.....	59,092	79,815	89,211	83,173	92,329	80,113
Total cattle.....	110,521	125,477	139,143	138,195	145,942	130,578
Sheep.....	73,046	114,955	128,529	131,763	105,703	83,933
Swine.....	40,814	49,510	49,917	42,447	37,351	42,011
Turkeys.....	7,026	9,388	6,482	4,153	12,751	12,284
Geese.....	27,375	26,544	22,654	27,069	34,882	35,354
Ducks.....	8,249	13,134	9,282	11,133	16,295	21,445
Other fowls.....	547,963	575,647	611,399	647,088	781,745	760,364
Total poultry.....	590,613	624,713	649,817	689,443	845,673	827,450
Nova Scotia—						
Horses.....	70,101	69,589	67,583	61,321	58,914	49,793
Milch cows.....	157,829	162,230	170,308	143,780	144,937	129,161
Other cattle.....	249,422	243,831	228,153	189,512	174,765	141,887
Total cattle.....	407,251	406,061	398,461	333,292	319,702	271,048
Sheep.....	259,847	261,529	403,567	324,260	329,345	258,537
Swine.....	68,238	69,982	57,950	52,064	47,504	44,034
Turkeys.....	15,334	7,903	6,283	7,853	9,519	7,775
Geese.....	18,677	15,796	16,532	13,460	17,311	12,979
Ducks.....	11,236	17,545	10,543	10,678	12,770	22,810
Other fowls.....	825,789	813,715	805,328	708,753	910,205	808,321
Total poultry.....	871,036	854,959	838,686	740,744	949,805	851,885
New Brunswick—						
Horses.....	66,590	77,828	76,737	69,958	70,152	50,644
Milch cows.....	120,123	153,058	147,760	139,055	146,054	106,076
Other cattle.....	166,624	211,964	185,228	156,391	157,061	106,825
Total cattle.....	286,747	365,022	332,988	295,446	303,115	212,901
Sheep.....	140,015	212,745	280,090	236,951	236,031	157,808
Swine.....	79,814	104,939	92,925	89,337	85,260	66,182
Turkeys.....	23,395	30,627	22,192	29,452	44,282	38,170
Geese.....	18,806	24,396	20,142	22,585	25,057	16,936
Ducks.....	10,370	12,056	8,913	11,826	13,538	9,950
Other fowls.....	621,841	729,619	701,987	679,542	1,168,619	852,779
Total poultry.....	674,412	796,698	753,234	743,405	1,251,496	917,835
Quebec—						
Horses.....	496,811	463,902	433,199	406,959	368,590	341,651
Milch cows.....	1,163,865	1,056,347	1,030,809	1,040,389	1,006,992	968,705
Other cattle.....	1,245,819	1,213,297	1,101,403	1,013,005	851,398	813,046
Total cattle.....	2,409,684	2,269,644	2,132,212	2,053,394	1,858,590	1,781,751
Sheep.....	959,070	1,007,425	1,031,982	1,006,617	990,818	822,997
Swine.....	997,255	935,425	836,431	833,920	728,926	797,726
Turkeys.....	167,605	118,904	114,377	146,004	206,659	208,549
Geese.....	157,665	124,380	130,384	129,864	125,247	114,286
Ducks.....	94,703	108,206	115,697	80,618	68,673	62,741
Other fowls.....	4,944,021	3,457,480	3,177,402	3,476,729	6,117,723	6,096,680
Total poultry.....	5,363,994	3,808,970	3,537,860	3,833,215	6,518,302	6,482,256
Ontario—						
Horses.....	732,977	719,569	704,640	694,237	685,852	673,371
Milch cows.....	1,097,039	1,141,016	1,170,010	1,204,270	1,235,665	1,265,965
Other cattle.....	1,770,683	1,786,175	1,711,817	1,685,843	1,600,516	1,572,122
Total cattle.....	2,867,722	2,927,191	2,881,827	2,890,113	2,836,181	2,838,087
Sheep.....	972,341	1,101,740	1,129,084	1,081,828	986,617	907,673
Swine.....	1,656,386	1,695,487	1,614,356	1,563,807	1,553,434	1,734,734
Turkeys.....	376,609	327,802	267,883	291,377	336,447	364,425
Geese.....	412,214	426,663	395,238	413,219	446,487	467,749
Ducks.....	392,001	377,838	311,652	363,758	440,539	449,486
Other fowls.....	11,100,281	10,573,506	10,030,872	10,389,852	12,740,844	13,921,724
Total poultry.....	12,281,105	11,705,809	11,005,645	11,458,206	13,964,317	15,203,384
Manitoba—						
Horses.....	384,772	379,356	356,628	419,789	374,632	362,407
Milch cows.....	225,659	227,872	221,785	251,799	252,245	253,715
Other cattle.....	521,240	553,899	536,189	565,960	488,495	437,996
Total cattle.....	746,899	781,771	757,974	817,759	740,740	691,711
Sheep.....	136,782	167,170	156,716	131,361	112,863	93,162
Swine.....	284,596	261,542	212,542	224,704	235,214	291,236
Turkeys.....	128,440	157,518	145,000	172,380	210,709	200,118
Geese.....	51,103	61,025	64,500	72,847	73,833	58,836
Ducks.....	51,552	82,715	64,000	61,015	76,576	70,876
Other fowls.....	2,122,928	2,429,908	3,100,000	3,449,598	3,250,990	2,959,221
Total poultry.....	2,354,023	2,731,166	3,373,500	3,756,290	3,612,108	3,289,051

17.—Estimated Numbers of Farm Live Stock in Canada, 1918-1923—concluded.

Live Stock.	1918.	1919.	1920.	1921.	1922.	1923.
	No.	No.	No.	No.	No.	No.
Saskatchewan—						
Horses.....	990,009	1,078,452	939,805	1,169,278	1,143,502	1,137,301
Milch cows.....	352,989	374,062	354,507	421,706	456,006	403,813
Other cattle.....	926,342	1,005,501	969,555	1,141,626	1,146,780	1,131,274
Total cattle.....	1,279,331	1,379,563	1,324,062	1,563,332	1,602,786	1,535,027
Sheep.....	134,177	146,911	160,918	188,021	191,937	137,240
Swine.....	521,240	432,367	321,900	432,776	563,069	679,867
Turkeys.....	208,125	179,852	221,691	255,923	419,063	675,303
Geese.....	113,493	112,103	92,743	109,365	121,530	148,208
Ducks.....	187,059	144,221	75,188	136,933	210,255	281,373
Other fowls.....	7,491,692	8,079,351	6,217,518	9,051,788	7,705,102	7,996,868
Total poultry.....	8,000,369	8,515,527	6,607,140	9,554,009	8,455,950	9,101,752
Alberta—						
Horses.....	791,246	800,380	741,851	916,510	863,316	829,143
Milch cows.....	328,702	336,596	305,607	423,838	332,037	410,242
Other cattle.....	1,362,880	1,247,448	1,050,334	1,430,364	1,261,005	1,110,682
Total cattle.....	1,691,582	1,584,044	1,355,941	1,854,202	1,653,042	1,520,924
Sheep.....	332,179	364,498	383,424	523,599	260,366	239,174
Swine.....	601,534	445,858	286,556	574,318	623,188	706,681
Turkeys.....	129,838	439,244	2,399,855	283,346	337,336	580,510
Geese.....	73,733			83,363	89,724	93,638
Ducks.....	116,942			62,814	86,536	98,455
Other fowls.....	2,701,820	3,987,131		4,534,042	4,908,543	5,857,560
Total poultry.....	3,022,333	4,426,375	2,399,855	4,963,565	5,422,139	6,630,163
British Columbia—						
Horses.....	44,131	43,717	44,070	44,558	51,083	54,017
Milch cows.....	50,965	51,594	53,974	57,973	60,255	71,223
Other cattle.....	195,165	194,644	195,614	203,399	201,716	192,921
Total cattle.....	246,130	246,238	249,588	261,372	261,971	264,144
Sheep.....	45,291	44,985	46,473	51,457	49,745	53,336
Swine.....	39,805	44,960	44,010	41,522	41,738	42,845
Turkeys.....	5,610	7,717	7,858	8,556	13,515	18,349
Geese.....	6,111	11,962	12,262	11,918	13,198	15,217
Ducks.....	11,922	21,977	22,363	23,369	32,957	29,348
Other fowls.....	978,163	1,139,365	1,297,599	1,403,082	1,851,102	2,102,602
Total poultry.....	1,001,806	1,181,021	1,340,082	1,446,916	1,910,772	2,165,516

Production and Value of Wool.—The estimated total wool clip of Canada for 1923, as shown by provinces in Table 18, was 15,539,416 lb. as compared with 18,523,392 lb. in 1922. Table 19 shows the estimated production, price per lb. and total value of the wool clip of the country for each of the years 1915 to 1923. The average prices per lb. for washed and unwashed wool, by provinces, for the years 1921 to 1923, will be found in Table 20.

18.—Estimated Wool Clip of Canada, by Provinces, 1923.

Provinces.	Sheep.	Sheep's wool.	Lambs.	Lamb's wool.	Sheep and lambs.	Total wool.
	No.	lb.	No.	lb.	No.	lb.
Prince Edward Island.....	46,781	327,467	37,152	148,608	83,933	476,075
Nova Scotia.....	140,479	983,353	118,058	472,232	258,537	1,455,585
New Brunswick.....	87,441	612,087	70,367	281,468	157,808	893,555
Quebec.....	463,538	3,244,766	359,459	1,437,836	822,997	4,682,602
Ontario.....	464,549	3,251,843	443,124	1,772,496	907,673	5,024,339
Manitoba.....	51,010	357,070	42,152	168,608	93,162	525,678
Saskatchewan.....	79,483	556,381	57,757	231,028	137,240	787,409
Alberta.....	143,517	1,004,619	95,657	382,628	239,174	1,387,247
British Columbia.....	28,530	199,710	24,806	99,224	53,336	298,934
Indian Reserves.....	780	5,460	633	2,532	1,413	*7,992
Total.....	1,506,108	10,542,756	1,249,165	4,996,660	2,755,273	15,539,416

19.—Estimated Value of Canadian Wool Clip, 1915-1923.

Years.	Sheep.	Production of wool.	Average price per lb. of wool.	Value.
	No.	lb.	cents.	\$
1915.....	2,038,662	12,000,000	28	3,360,000
1916.....	2,022,941	12,000,000	37	4,440,000
1917.....	2,369,358	12,000,000	59	7,000,000
1918.....	3,052,748	20,000,000	60	12,000,000
1919.....	3,421,958	20,000,000	60	12,000,000
1920.....	3,720,783	24,000,000	22	5,280,000
1921.....	3,675,860	21,251,000	14	2,975,000
1922.....	3,262,626	18,523,392	17	3,149,000
1923.....	2,755,273	15,539,416	20	3,160,000

Values of Farm Live Stock and of Wool.—Average values for horses and cattle (Tables 20 and 21) showed a decline as compared with the previous year, the falling off being most marked in the Prairie Provinces. Sheep remained at about the same level as in 1922, and there was some recovery in the price of wool. Swine showed a decrease in average value per head in every province. For Canada, horses under one year old averaged \$31, as against \$34 in 1922; horses one year to under three years \$66, against \$70; horses three years old and over \$103, against \$111. Cattle under one year averaged \$11, the same as for 1922; cattle one year to under three years \$24, against \$25, and cattle three years and over \$36, against \$38. For all descriptions the average value per head for Canada was as follows, the corresponding value for 1922 being given within parentheses: horses \$63 (\$72); milch cows \$47 (\$48); other cattle \$26 (\$26); total cattle \$34 (\$35); sheep \$8 (\$8); swine \$12 (\$15). For swine per 100 lb. live weight the average was \$8, as against \$10.

The average price of wool was returned as 20 cents per lb. for unwashed and 28 cents per lb. for washed, the prices for 1922 being 17 and 24 cents respectively.

By application of the average values per head to the numbers as returned in June last, it is possible (Table 22) to calculate approximately the total value of farm live stock in Canada for the year 1923, as compared with 1922, in parentheses, as follows: horses \$223,154,000 (\$264,043,000); milch cows \$173,015,000 (\$179,141,000); other cattle \$143,458,000 (\$156,441,000); all cattle \$316,473,000 (\$335,582,000); sheep \$21,321,000 (\$24,962,000); swine \$52,312,000 (\$57,300,000). The estimated total value of these descriptions of farm live stock amounted for 1923 to \$613,260,000, as compared with \$681,887,000 in 1922, \$765,964,000 in 1921 and \$1,046,717,000 in 1920. For farm poultry (Table 22) we get for 1923, as compared with 1922 in parentheses, turkeys \$4,459,100 (\$4,822,800); geese \$1,919,300 (\$2,161,300); ducks \$1,064,200 (\$1,118,300); other fowls \$32,397,700 (\$33,092,900), the total value for all descriptions being thus \$39,840,300 (\$41,195,300). By adding the total value of farm poultry to that of horses, cattle, sheep and swine, we get a grand total value for farm live stock, including poultry, of \$653,100,300, as compared with \$723,082,300 in 1922 (Table 22). The values of farm poultry per head for each of the years 1920 to 1923 are given in Table 23.

20.—Average Values of Farm Animals and of Wool, as estimated by Crop Correspondents, 1921-1923.

Provinces.	Horses.			Milch cows.	Other horned cattle.			Swine per 100 lb. live weight.	Sheep.	Wool per lb.	
	Under 1 year.	1 year to under 3 years.	3 years and over.		Under 1 year.	1 year to under 3 years.	3 years and over.			Un-washed.	Washed.
	\$	\$	\$	\$	\$	\$	\$	\$	\$	c.	c.
Canada.....											
1921	38	79	123	51	12	26	39	10	6	0 14	0 22
1922	34	70	111	48	11	25	38	10	8	0 17	0 24
1923	31	66	103	47	11	24	36	8	8	0 20	0 28
P. E. Island.....											
1921	35	74	112	38	9	20	30	9	5	0 13	0 19
1922	39	76	119	47	10	23	35	10	7	0 17	0 21
1923	35	72	103	43	9	21	31	7	6	0 20	0 26
Nova Scotia.....											
1921	41	88	134	44	10	24	41	11	4	0 15	0 20
1922	40	82	133	45	10	23	40	11	6	0 18	0 23
1923	42	88	139	44	11	28	41	10	6	0 21	0 26
New Brunswick.....											
1921	43	96	151	40	10	23	33	10	5	0 13	0 19
1922	46	99	155	40	11	25	36	11	6	0 19	0 26
1923	47	101	154	43	12	25	38	9	6	0 22	0 29
Quebec.....											
1921	36	85	136	46	9	21	33	11	6	0 21	0 31
1922	38	85	135	45	10	22	35	12	8	0 21	0 32
1923	39	85	135	42	10	20	31	9	7	0 23	0 32
Ontario.....											
1921	48	88	126	59	13	32	47	10	8	0 10	0 15
1922	43	82	121	58	16	33	48	10	9	0 15	0 19
1923	39	76	113	58	15	31	47	8	9	0 19	0 26
Manitoba.....											
1921	37	75	117	45	10	21	31	9	6	0 09	0 14
1922	33	71	110	42	10	23	34	8	7	0 13	0 17
1923	26	54	85	40	9	21	33	7	7	0 14	0 20
Saskatchewan.....											
1921	31	71	118	49	11	27	40	9	6	0 12	0 15
1922	25	55	93	40	9	22	33	8	7	0 16	0 20
1923	21	44	74	39	9	20	31	7	6	0 18	0 20
Alberta.....											
1921	20	46	65	48	10	25	37	9	6	0 12	0 20
1922	14	32	60	38	8	19	30	9	7	0 15	0 23
1923	14	29	56	39	9	20	32	6	8	0 19	0 24
Brit. Columbia.....											
1921	33	75	138	85	18	40	58	12	8	0 08	0 12
1922	25	54	105	69	13	30	46	11	9	0 17	0 25
1923	24	57	100	70	12	26	39	11	10	0 17	0 18

NOTE.—See paragraph on the production and value of wool on page 230.

21.—Average Values per head of Farm Animals in Canada, as estimated by Crop Correspondents, 1915-1923.

Farm Animals.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.
	\$	\$	\$	\$	\$	\$	\$	\$	\$
Canada—									
Horses.....	125	129	126	127	119	106	83	72	63
Milch cows.....	62	70	86	87	92	80	51	48	47
Other cattle.....	45	54	57	61	58	47	28	26	26
Total cattle.....	52	61	69	70	70	59	37	35	34
Sheep.....	8	10	15	16	15	10	6	8	8
Swine.....	14	18	26	26	25	23	14	15	12
P. E. Island—									
Horses.....	106	87	88	103	114	109	84	92	80
Milch cows.....	42	52	64	71	83	60	38	47	43
Other cattle.....	28	35	38	44	53	34	21	26	22
Total cattle.....	34	42	50	54	64	43	28	34	30
Sheep.....	7	9	14	15	14	8	5	7	6
Swine.....	13	20	27	29	27	24	16	19	11
Nova Scotia—									
Horses.....	121	108	111	117	127	119	98	95	96
Milch cows.....	45	53	63	65	76	71	44	45	44
Other cattle.....	32	38	45	44	54	43	27	26	28
Total cattle.....	38	45	54	53	63	55	34	35	35
Sheep.....	6	7	9	10	11	8	4	6	6
Swine.....	18	18	29	30	29	24	18	18	16

21.—Average Values per head of Farm Animals in Canada, as estimated by Crop Correspondents, 1915-1923—concluded.

Farm Animals.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.
	\$	\$	\$	\$	\$	\$	\$	\$	\$
New Brunswick—									
Horses.....	137	127	127	141	138	139	115	110	99
Milch cows.....	40	49	63	65	70	61	40	40	43
Other cattle.....	28	33	40	41	42	39	23	25	26
Total cattle.....	34	41	52	51	53	49	31	32	34
Sheep.....	5	7	10	12	11	8	5	6	6
Swine.....	18	17	27	28	31	22	17	17	16
Quebec—									
Horses.....	112	115	132	131	134	126	89	100	97
Milch cows.....	51	62	82	79	84	75	46	45	42
Other cattle.....	41	51	46	45	44	38	23	23	22
Total cattle.....	46	57	63	61	61	56	35	35	33
Sheep.....	8	11	15	14	13	10	6	8	7
Swine.....	15	17	29	26	24	26	16	19	15
Ontario—									
Horses.....	120	125	113	111	110	108	96	90	84
Milch cows.....	70	76	93	96	107	92	59	58	58
Other cattle.....	48	65	63	67	68	57	34	34	33
Total cattle.....	59	71	79	78	83	71	45	44	44
Sheep.....	10	13	19	20	18	12	8	9	9
Swine.....	14	18	25	27	25	23	13	14	12
Manitoba—									
Horses.....	133	128	138	141	131	114	89	84	64
Milch cows.....	65	74	88	91	90	71	45	42	40
Other cattle.....	44	51	57	64	58	44	23	25	23
Total cattle.....	52	59	69	73	67	52	30	31	29
Sheep.....	9	12	16	17	15	9	6	7	7
Swine.....	15	17	24	26	27	22	14	14	11
Saskatchewan—									
Horses.....	147	149	138	149	125	108	82	67	53
Milch cows.....	69	73	85	91	91	73	49	40	39
Other cattle.....	48	51	59	66	62	45	28	23	21
Total cattle.....	54	58	66	73	70	59	33	28	26
Sheep.....	8	10	14	17	15	8	6	7	6
Swine.....	13	17	25	28	26	20	14	13	10
Alberta—									
Horses.....	113	121	122	107	94	80	64	42	40
Milch cows.....	69	77	89	93	89	71	48	38	39
Other cattle.....	49	56	64	70	60	45	28	21	23
Total cattle.....	53	61	70	74	66	51	32	25	27
Sheep.....	8	10	15	15	14	10	6	7	8
Swine.....	13	17	24	24	25	18	13	12	10
British Columbia—									
Horses.....	102	108	118	123	129	126	100	78	75
Milch cows.....	91	94	103	106	118	125	85	69	70
Other cattle.....	50	55	65	67	71	72	40	33	27
Total cattle.....	61	66	73	75	81	99	50	41	39
Sheep.....	8	11	14	15	16	11	8	9	10
Swine.....	15	19	21	24	28	21	17	16	14

22.—Estimated Total Values of Farm Animals in Canada, by Provinces, 1919-1923, and of Poultry, 1921-1923.

Description.	1919.	1920.	1921.	1922.	1923.
	\$	\$	\$	\$	\$
Canada—					
Horses.....	435,070,000	361,328,000	314,764,000	264,043,000	223,154,000
Milch cows.....	327,814,000	278,482,000	190,203,000	179,141,000	173,015,000
Other cattle.....	381,007,000	288,491,000	183,647,000	156,441,000	143,458,000
Total cattle.....	708,821,000	566,973,000	373,850,000	335,582,000	316,473,000
Sheep.....	50,402,000	37,263,000	23,308,000	24,962,000	21,321,000
Swine.....	102,309,000	81,153,000	54,042,000	57,300,000	52,312,000
Total animals.....	1,296,602,000	1,046,717,000	765,964,000	681,887,000	613,260,000

**22.—Estimated Total Values of Farm Animals in Canada, by Provinces, 1919-1923,
and of Poultry, 1921-1923—con.**

Description.	1919.	1920.	1921.	1922.	1923.
	\$	\$	\$	\$	\$
Canada—con.					
Turkeys.....	—	—	4,069,300	4,822,800	4,459,100
Geese.....	—	—	2,134,300	2,161,300	1,919,300
Ducks.....	—	—	950,900	1,118,300	1,064,200
Other fowls.....	—	—	30,860,000	33,092,900	32,397,700
Total poultry.....	—	—	38,015,100	41,195,300	39,840,300
Grand Total.....	—	—	803,979,100	723,082,300	653,100,300
Prince Edward Island—					
Horses.....	3,935,000	3,880,000	2,637,000	3,011,000	2,575,000
Milch cows.....	3,794,000	2,975,000	2,079,000	2,482,000	2,148,000
Other cattle.....	4,230,000	3,016,000	1,782,000	2,375,000	1,785,000
Total cattle.....	8,024,000	5,991,000	3,861,000	4,857,000	3,933,000
Sheep.....	1,603,000	1,073,000	654,000	779,000	532,000
Swine.....	1,320,000	1,205,000	688,000	726,000	473,000
Total animals.....	14,882,000	12,149,000	7,840,000	9,373,000	7,513,000
Turkeys.....	—	—	18,000	49,700	30,700
Geese.....	—	—	74,400	93,800	74,700
Ducks.....	—	—	15,500	20,900	23,200
Other fowls.....	—	—	575,900	648,800	555,000
Total poultry.....	—	—	683,800	813,200	683,600
Grand Total.....	—	—	8,523,800	10,186,200	8,196,600
Nova Scotia—					
Horses.....	8,838,000	8,066,000	6,007,000	5,588,000	4,769,000
Milch cows.....	12,329,000	12,033,000	6,259,000	6,575,000	5,686,000
Other cattle.....	13,167,000	9,894,000	5,076,000	4,570,000	3,910,000
Total cattle.....	25,496,000	21,927,000	11,335,000	11,145,000	9,596,000
Sheep.....	2,877,000	3,260,000	1,437,000	2,003,000	1,513,000
Swine.....	2,029,000	1,395,000	937,000	862,000	691,000
Total animals.....	39,240,000	31,648,000	19,716,000	19,598,000	16,569,000
Turkeys.....	—	—	31,300	33,500	24,000
Geese.....	—	—	38,000	46,000	31,300
Ducks.....	—	—	16,000	17,800	27,800
Other fowls.....	—	—	645,000	746,400	654,700
Total poultry.....	—	—	730,300	843,700	737,800
Grand Total.....	—	—	20,446,300	20,441,700	17,306,800
New Brunswick—					
Horses.....	10,776,000	10,666,000	8,045,000	7,709,000	5,026,000
Milch cows.....	10,640,000	9,013,000	5,562,000	5,879,000	4,561,000
Other cattle.....	8,870,000	7,224,000	3,597,000	3,949,000	2,734,000
Total cattle.....	19,510,000	16,237,000	9,159,000	9,828,000	7,295,000
Sheep.....	2,449,000	2,241,000	1,185,000	1,303,000	966,000
Swine.....	3,291,000	2,044,000	1,519,000	1,456,000	1,070,000
Total animals.....	36,026,000	31,188,000	19,908,000	20,326,000	14,357,000
Turkeys.....	—	—	124,900	201,500	130,500
Geese.....	—	—	65,900	71,900	45,000
Ducks.....	—	—	17,700	21,000	14,000
Other fowls.....	—	—	713,500	1,192,000	844,300
Total poultry.....	—	—	922,000	1,486,400	1,033,800
Grand Total.....	—	—	20,830,000	21,812,400	15,390,800

22.—Estimated Total Values of Farm Animals in Canada, by Provinces, 1919-1923,
and of Poultry, 1921-1923—con.

Description.	1919.	1920.	1921.	1922.	1923.
	\$	\$	\$	\$	\$
Quebec—					
Horses.....	62,163,000	55,583,000	36,219,000	37,023,000	33,275,000
Milch cows.....	88,734,000	77,311,000	47,858,000	45,162,000	40,436,000
Other cattle.....	50,385,000	41,853,000	23,299,000	19,651,000	18,171,000
Total cattle.....	139,119,000	119,164,000	71,157,000	64,813,000	58,607,000
Sheep.....	13,097,000	10,320,000	6,040,000	7,587,000	5,775,000
Swine.....	22,450,000	21,747,000	13,343,000	13,664,000	12,038,000
Total animals.....	236,829,000	206,814,000	126,759,000	123,087,000	109,695,000
Turkeys.....	—	—	528,500	756,400	617,300
Geese.....	—	—	300,000	304,400	237,700
Ducks.....	—	—	111,300	93,400	75,900
Other fowls.....	—	—	3,893,900	6,178,900	5,913,800
Total poultry.....	—	—	4,833,700	7,333,100	6,844,700
Grand Total.....	—	—	131,592,700	130,420,100	116,539,700
Ontario—					
Horses.....	79,153,000	76,197,000	66,349,000	61,520,000	56,823,000
Milch cows.....	121,623,000	107,128,000	71,250,000	71,167,000	73,575,000
Other cattle.....	121,272,000	97,879,000	57,517,000	54,749,000	52,311,000
Total cattle.....	242,895,000	205,007,000	128,767,000	125,916,000	125,886,000
Sheep.....	19,831,000	13,349,000	8,249,000	8,904,000	8,561,000
Swine.....	42,387,000	37,641,000	20,659,000	22,415,000	20,056,000
Total animals.....	384,266,000	332,194,000	224,021,000	218,755,000	211,326,000
Turkeys.....	—	—	1,217,000	1,268,400	1,056,800
Geese.....	—	—	1,024,800	1,058,200	1,005,700
Ducks.....	—	—	476,500	568,300	525,900
Other fowls.....	—	—	10,909,300	12,613,400	13,086,400
Total poultry.....	—	—	13,627,600	15,508,300	15,674,800
Grand Total.....	—	—	237,651,600	234,263,300	227,000,500
Manitoba—					
Horses.....	49,523,000	40,536,000	37,305,000	31,599,000	23,265,000
Milch cows.....	20,609,000	15,698,000	11,378,000	10,589,000	10,170,000
Other cattle.....	32,075,000	23,646,000	13,130,000	12,302,000	9,952,000
Total cattle.....	52,684,000	39,344,000	24,508,000	22,891,000	20,122,000
Sheep.....	2,518,000	1,389,000	783,000	789,000	658,000
Swine.....	7,185,000	4,601,000	3,039,000	3,320,000	3,091,000
Total animals.....	111,910,000	85,870,000	65,635,000	58,599,000	47,136,000
Turkeys.....	—	—	561,700	518,300	336,200
Geese.....	—	—	160,300	141,000	84,100
Ducks.....	—	—	62,800	75,000	64,600
Other fowls.....	—	—	2,690,700	2,210,700	1,775,500
Total poultry.....	—	—	3,475,500	2,945,000	2,250,400
Grand Total.....	—	—	69,110,500	61,544,000	49,386,400
Saskatchewan—					
Horses.....	139,807,000	101,499,000	95,463,000	76,978,000	59,931,000
Milch cows.....	34,040,000	25,879,000	20,577,000	18,405,000	15,645,000
Other cattle.....	62,341,000	43,630,000	31,662,000	26,064,000	24,133,000
Total cattle.....	96,381,000	69,500,000	52,239,000	44,469,000	39,778,000
Sheep.....	2,204,000	1,287,000	1,200,000	1,364,000	874,000
Swine.....	11,242,000	6,438,000	5,963,000	7,200,000	6,893,000
Total animals.....	249,634,000	178,733,000	154,865,000	130,011,000	107,476,000
Turkeys.....	—	—	729,400	1,114,100	1,229,000
Geese.....	—	—	250,400	238,200	252,000
Ducks.....	—	—	146,500	197,600	233,500
Other fowls.....	—	—	6,336,300	4,700,100	4,478,000
Total poultry.....	—	—	7,462,600	6,250,000	6,192,500
Grand Total.....	—	—	162,327,600	136,261,000	113,668,500

**22.—Estimated Total Values of Farm Animals in Canada, by Provinces, 1919-1923,
and of Poultry, 1921-1923—concluded.**

Description.	1919.	1920.	1921.	1922.	1923.
	\$	\$	\$	\$	\$
Alberta—					
Horses.....	75,236,000	59,348,000	58,283,000	36,630,000	33,439,000
Milch cows.....	29,957,000	21,698,000	20,312,000	14,724,000	15,808,000
Other cattle.....	74,847,000	47,265,000	39,448,000	26,124,000	25,253,000
Total cattle.....	101,804,000	68,963,000	59,760,000	40,848,000	41,061,000
Sheep.....	5,103,000	3,833,000	3,348,000	1,785,000	1,912,000
Swine.....	11,146,000	5,158,000	7,188,000	7,168,000	7,400,000
Total animals.....	196,289,000	137,302,000	128,579,000	86,431,000	83,812,000
Turkeys.....	—	—	821,700	829,800	975,300
Geese.....	—	—	185,000	172,300	150,800
Ducks.....	—	—	71,000	83,100	75,800
Other fowls.....	—	—	3,173,800	2,896,000	2,987,400
Total poultry.....	—	—	4,251,500	3,981,200	4,189,300
Grand Total.....	—	—	132,830,500	90,412,200	88,001,300
British Columbia—					
Horses.....	5,639,000	5,553,000	4,456,000	3,985,000	4,051,000
Milch cows.....	6,088,000	6,747,000	4,928,000	4,158,000	4,986,000
Other cattle.....	13,820,000	14,084,000	8,136,000	6,657,000	5,209,000
Total cattle.....	19,908,000	20,831,000	13,064,000	10,815,000	10,195,000
Sheep.....	720,000	511,000	412,000	448,000	530,000
Swine.....	1,259,000	924,000	706,000	459,000	600,000
Total animals.....	27,526,000	27,819,000	18,638,000	15,707,000	15,376,000
Turkeys.....	—	—	36,800	51,100	59,300
Geese.....	—	—	35,500	35,500	38,000
Ducks.....	—	—	33,600	41,200	33,500
Other fowls.....	—	—	1,922,200	1,906,600	2,102,600
Total poultry.....	—	—	2,028,100	2,034,400	2,233,400
Grand Total.....	—	—	20,666,100	17,741,400	17,609,400

**23.—Average Values per head of Farm Poultry, as estimated by Crop Correspondents,
1920-1923.**

Provinces.	Years.	Turkeys.	Geese.	Ducks.	Other fowls.
		\$ c.	\$ c.	\$ c.	\$ c.
Canada.....	1920	4 00	2 80	1 50	1 08
	1921	3 39	2 42	1 25	0 90
	1922	3 00	2 28	1 17	0 84
	1923	2 12	2 00	1 02	0 78
P. E. Island.....	1920	3 72	2 85	1 46	1 00
	1921	4 33	2 75	1 39	0 89
	1922	3 90	2 69	1 28	0 83
	1923	2 50	2 24	1 08	0 73
Nova Scotia.....	1920	4 24	3 05	1 50	1 00
	1921	3 98	2 83	1 50	0 91
	1922	3 52	2 66	1 39	0 82
	1923	3 09	2 41	1 22	0 81
New Brunswick.....	1920	4 00	3 07	1 59	1 15
	1921	4 24	2 92	1 50	1 05
	1922	4 55	2 87	1 55	1 02
	1923	3 42	2 66	1 41	0 99
Quebec.....	1920	4 35	2 74	1 59	1 23
	1921	3 62	2 31	1 38	1 12
	1922	3 66	2 43	1 36	1 00
	1923	2 96	2 08	1 21	0 97

23.—Average Values per head of Farm Poultry, as estimated by Crop Correspondents, 1920-1923—concluded.

Provinces.	Years.	Turkeys.		Geese.		Ducks.		Other fowls.	
		\$	c.	\$	c.	\$	c.	\$	c.
Ontario.....	1920	5	00	2	88	1	58	1	19
	1921	4	18	2	48	1	31	1	05
	1922	3	77	2	37	1	29	0	99
	1923	2	90	2	15	1	17	0	94
Manitoba.....	1920	3	31	2	55	1	25	0	90
	1921	3	25	2	20	1	03	0	78
	1922	2	46	1	91	0	98	0	68
	1923	1	68	1	43	0	77	0	60
Saskatchewan.....	1920	3	00	2	50	1	25	0	92
	1921	2	85	2	29	1	07	0	70
	1922	2	42	1	96	0	94	0	61
	1923	1	82	1	70	0	83	0	56
Alberta.....	1920	3	07	2	55	1	22	0	92
	1921	2	90	2	22	1	13	0	70
	1922	2	46	1	92	0	96	0	59
	1923	1	68	1	61	0	77	0	51
British Columbia.....	1920	7	50	3	58	1	85	1	50
	1921	4	30	2	98	1	44	1	37
	1922	3	78	2	69	1	25	1	03
	1923	3	23	2	50	1	14	1	00

Egg Production in Canada, 1922 and 1923.—Calculations published by the Dominion Bureau of Statistics place the estimated egg production on the farms of Canada in 1923 at 202,186,508 dozen, valued at \$48,770,780, from 31,064,992 hens on farms, as compared with 194,058,468 dozen, valued at \$48,490,578, from 29,945,484 hens on farms in 1922. These estimates do not include eggs other than those produced on farms.¹

4.—Fur Farming.

Origin of Fur Farming Industry.—Since the early days of the fur trade, it has been the practice in Canada for trappers to keep foxes, caught in warm weather, alive until the fur was prime, and from this custom has arisen the modern industry of fur farming. The earliest authentic record of the raising of foxes in captivity comes from Prince Edward Island, where about forty-five years ago a number of foxes were raised on a farm near Tignish. The beauty of the fur of the silver fox and the consequent high prices realized from the sale of the pelts, caused attention to be directed chiefly to this breed, a colour phase of the common red fox, which has been established through experiments in breeding carried on by the pioneer fox farmers. After 1890 there came a period of rising prices for furs, and the fox farming industry grew rapidly in Prince Edward Island. In 1913 an enumeration by the Provincial Commissioner of Agriculture showed 277 fox farms in that province with a total of 3,130 foxes². While experiments were being carried on in Prince Edward Island, attempts at raising foxes in captivity were also being made in other provinces, the records showing that foxes were successfully bred in Quebec in 1898, in Ontario in 1905 and in Nova Scotia in 1906. In 1912 and 1913 the Commission of Conservation conducted an exhaustive inquiry into the history and possibilities of fur farming in Canada, and the resulting data, published in 1913, gave an impetus to the

¹ For details by provinces, see Monthly Bulletin of Agricultural Statistics, December, 1923 (Vol. 16, No. 184, pp. 494-5).

² Census and Statistics Monthly, May, 1914 (Vol. 7, No. 69, p. 110).

industry¹. The Prince Edward Island Silver Fox Breeders' Association was formed in 1915, and the Canadian Silver Fox Breeders' Association in 1920. Fox farming is now carried on in all provinces of the Dominion and the number of farms is steadily increasing.

Although the fox has proved the most suited to domestication, other kinds of fur-bearing wild animals are being raised in captivity—mink, raccoon, skunk, marten, fisher, beaver and muskrat. Karakul sheep, from which are obtained the furs known as "persian lamb", "astrachan" and "broadtail", are also being raised successfully in Canada. Raccoon farms are the most numerous of the miscellaneous class, mink farms coming next. A few of the fox farms also raise miscellaneous fur-bearing animals in addition to the foxes.

Fur Farms of Canada, 1923.—The term "fur farm" includes farms devoted entirely to the raising of fur-bearing animals, together with parts of farms where the raising of fur-bearing animals is carried on as a distinct branch of the operations. Of such farms there were 1,240 in Canada in 1923, comprising 1,179 fox farms and 61 farms raising fur-bearing animals other than foxes. Chief in number among the latter are raccoon farms numbering 22, mink farms numbering 12 and muskrat farms numbering 10. Compared with 1922, the fox farms show an increase of 202 and the miscellaneous fur-bearing animal farms an increase of 12. Farms for the raising of Chinchilla rabbits, of Siberian hares and of coyotes and prairie wolves are recorded in 1923 for the first time. Increases in the number of fur farms are shown by all the provinces, except Saskatchewan, but the largest proportionate increases are in Ontario and Alberta, where the numbers of farms have almost doubled. The total value of the fur farms in 1923 was, as shown in Table 24, \$8,424,964, comprising \$2,099,246, the value of land and buildings, and \$6,325,718, the value of the fur-bearing animals. Compared with 1922, an increase of \$173,295 is shown in the value of land and buildings, and an increase of \$461,565 in the value of the fur-bearing animals, a total increase in the value of property of \$634,860. Table 25 shows the number and value of fur-bearing animals on fur farms in Canada for the three years 1921-23, and Table 26 the number and value of fur-bearing animals sold and of pelts sold for the years 1922 and 1923. The former table shows that the number of fur-bearing animals on fur farms increased from 30,782 in 1922 to 40,125 in 1923, and that their value increased from \$5,864,153 to \$6,325,718.

Fur-bearing animals sold from fur farms during 1923 numbered 7,106, of the value of \$1,314,683, as compared with 4,339, value \$938,918, in 1922, silver foxes comprising 6,084, value \$1,286,375, in 1923, as against 3,794, value \$910,590, in 1922. The total number of pelts sold from fur farms in 1923 was 9,539, of the value of \$860,468, as compared with 6,024, value \$598,607, in 1922. Of silver foxes the number of pelts sold was 7,894, value \$819,429, as compared with 4,895, value \$573,806, in 1922. The average value for silver fox pelts was \$103.80 in 1923, as against \$117.30 in 1922.

Altogether the revenue derived from the sale of live foxes and of pelts totalled \$2,159,898 in 1923, as compared with \$1,526,822 in 1922. Silver foxes and pelts amounted in value to \$2,105,804 in 1923, and \$1,484,396 in 1922.

For further particulars the reader is referred to the report on Fur Farms, 1923, which may be obtained from the Dominion Statistician, Ottawa.

¹ Fur Farming in Canada. By J. Walter Jones, B.A., B.S.A., Commission of Conservation, Ottawa, second edition revised and enlarged, 1914.

24.—Number of Fur Farms, Value of Land and Buildings, and Value of Fur-bearing Animals, 1921-1923.

Provinces.	Fur Farms.			Value of Land and Buildings.			Value of Fur-bearing Animals.		
	1921.	1922.	1923.	1921.	1922.	1923.	1921.	1922.	1923.
	No.	No.	No.	\$	\$	\$	\$	\$	\$
P. E. Island.....	375	435	448	763,235	810,694	791,636	3,397,470	2,882,240	2,689,372
Nova Scotia.....	108	121	134	127,724	129,493	102,713	371,801	380,979	382,973
New Brunswick.....	64	86	89	132,810	160,605	186,580	651,830	679,100	714,985
Quebec.....	109	156	211	173,204	238,967	247,535	430,607	543,049	673,590
Ontario.....	94	128	215	144,049	200,360	279,823	374,517	566,780	855,783
Manitoba.....	6	19	23	90,850	202,685	239,305	406,525	451,825	450,130
Saskatchewan.....	5	9	9	37,075	40,200	44,311	98,800	56,050	92,063
Alberta.....	14	26	50	61,875	62,137	114,905	105,460	138,245	248,725
British Columbia.....	21	30	40	21,100	45,080	57,490	63,735	99,555	122,587
Yukon Territory.....	16	16	21	37,378	35,730	34,948	76,800	66,330	95,510
Totals.....	812	1,026	1,240	1,589,300	1,925,951	2,099,246	5,977,545	5,864,153	6,325,718

25.—Number and Value of Fur-bearing Animals on Fur Farms in Canada, 1921-1923.

Kinds of Animals.	1921.	1922.	1923.	1921.	1922.	1923.
	No.	No.	No.	\$	\$	\$
Silver fox.....	17,954	22,318	25,186	5,789,465	5,663,127	6,119,651
Patch or cross fox.....	1,237	1,384	1,556	102,850	103,055	108,324
Red fox.....	484	435	627	10,035	8,626	10,875
Blue fox.....	—	10	12	—	2,200	1,600
White fox.....	—	16	2	—	700	100
Mink.....	210	288	489	5,366	6,051	10,679
Raccoon.....	55	105	159	854	1,313	2,208
Skunk.....	99	34	92	500	396	784
Marten.....	8	3	11	410	175	950
Fisher.....	5	7	8	700	700	770
Lynx.....	2	3	2	200	150	50
Coyote.....	—	—	9	—	—	111
Chinchilla rabbit.....	—	—	222	—	—	2,230
Siberian hare.....	—	—	24	—	—	100
Karakul sheep.....	750	941	883	60,000	68,050	49,800
Beaver.....	40	81	23	1,350	2,400	625
Muskrat.....	2,250	5,157	10,820	5,550	7,210	16,861
Opossum.....	9	—	—	65	—	—
Beaver.....	2	—	—	200	—	—
Totals.....	23,105	30,782	40,125	5,977,545	5,864,153	6,325,718

26.—Number and Value of Fur-bearing Animals Sold and Pelts Sold from Fur Farms in Canada, 1922 and 1923.

Kinds.	1922.						1923.					
	Animals Sold.				Pelts Sold.		Animals Sold.				Pelts Sold.	
	Adults.		Young.				Adults.		Young.			
Silver fox.....	No.	\$	No.	\$	No.	\$	No.	\$	No.	\$	No.	\$
Patch or cross fox.....	785	202,345	3,009	708,245	4,895	573,806	1,623	351,973	4,461	934,402	7,894	819,429
fox.....	89	7,015	142	10,710	388	18,003	75	5,391	149	9,078	663	32,007
Red fox.....	28	704	60	1,425	377	4,494	41	632	44	657	414	5,849
Blue fox.....	—	—	—	—	1	75	—	—	—	—	—	—
White fox.....	—	—	—	—	—	—	—	—	—	—	12	480
Mink.....	9	290	66	1,344	74	723	29	668	128	3,413	85	773
Raccoon.....	17	413	12	630	9	61	26	418	11	71	41	165
Skunk.....	—	—	3	30	218	525	1	10	—	—	4	9
Coyote.....	—	—	—	—	—	—	—	—	—	—	33	301
Chinchilla rabbit.....	—	—	—	—	—	—	—	—	150	1,600	3	15
Karakul sheep.....	22	2,150	97	3,617	20	220	155	3,100	137	3,080	96	1,145
Beaver.....	—	—	—	—	42	700	—	—	—	—	—	—
Muskrat.....	—	—	—	—	—	—	40	100	36	90	294	295
Total.....	950	212,917	3,389	726,001	6,024	598,607	1,990	362,292	5,116	952,391	9,539	860,468

5.—Dairying Statistics.

Dairying is one of the oldest and is now one of the most important industries of Canada. The first permanent introduction of cows into Canada was undoubtedly made by Champlain at Quebec between 1608 and 1610. In 1629 he had 60 or 70 cattle on his farm at Cap Tourmente. In 1660, Colbert, the great French Minister, sent to New France representatives of the best dairy cows of Normandy and Brittany. In 1667 there were 3,107 head of cattle in New France and, in 1671, 866 in Acadia. The first cattle in what is now Ontario were taken thither by La Motte Cadillac in 1701. In 1823 a herd of 300 cattle was driven north to the Red River Settlement and sold to settlers, while cattle in British Columbia date from 1837. Modern dairying owes its development and expansion to the factory system for the making of cheese and butter, to the introduction from Denmark in 1882 of the centrifugal cream separator and to the facilities afforded by improved methods of cold storage, which came under Government organization in 1895.

Creamery Butter.—The first creamery in Canada was established at Athelstan, Huntingdon Co., Quebec, in 1873, while the first cream separator was installed at Ste. Marie, Beauce Co., Quebec, in 1882. The first Ontario creamery was established in 1875, and what was probably the first cream separator in Ontario was installed at Belleville in 1883. Butter reached its maximum exportation for the year ended June 30, 1903, with 34,128,944 lb. The latest figures for the year ended March 31, 1924, show an export of 1,348,968 lb. The quantity of creamery butter made in Canada in 1923 was 162,834,608 lb. (Table 27), valued at \$56,873,510, an increase in quantity over the preceding year of 10,332,708 lb., or 6·3 p.c., and an increase in value of \$3,420,228, or 6 p.c. The average price per lb. for the whole of Canada was 34 cents in 1923, compared with 35 cents in 1922. The production of creamery butter in 1923 exceeded in quantity the production of any previous year, and was exceeded in value only by 1920, when the average price per lb. was 57 cents.

27.—Production and Value of Creamery Butter, by Provinces, 1921-23.

Provinces.	1921.	1922.	1923.	1921.	1922.	1923.
	lb.	lb.	lb.	\$	\$	\$
Prince Edward Island.....	1,109,546	1,262,006	1,537,437	452,523	449,303	542,846
Nova Scotia.....	3,094,768	3,329,426	3,550,666	1,306,465	1,244,958	1,353,118
New Brunswick.....	1,152,168	1,224,930	1,231,471	475,112	467,287	456,557
Quebec.....	48,478,403	57,258,470	59,214,767	17,594,921	20,024,039	20,605,992
Ontario.....	43,471,532	51,633,070	54,873,180	16,680,247	18,218,629	19,478,505
Manitoba.....	8,541,095	10,559,601	10,730,060	3,253,057	3,603,491	3,662,444
Saskatchewan.....	7,030,053	8,901,144	10,867,010	2,552,698	3,066,573	3,632,377
Alberta.....	13,048,493	15,417,070	17,868,853	4,543,007	5,126,844	5,891,186
British Columbia.....	2,818,552	2,916,183	2,961,164	1,277,409	1,252,158	1,250,485
Total.....	128,744,610	152,501,900	162,834,608	48,135,439	53,453,282	56,873,510

Factory Cheese.—The early French colonists made butter and cheese, of which the "*fromage raffiné*," still made on the Isle of Orleans, is probably a survival. The United Empire Loyalists introduced cheese and butter-making into the districts settled by them, and in 1801 sent their surplus butter and cheese to the United States. The first modern cheese factory in Canada was established in Oxford county, Ontario, in 1864, while shortly afterwards factories were established in the Burkville and Belleville districts of Ontario, in Missisquoi county, Quebec, near Essex, New Brunswick, and in Annapolis county, Nova Scotia. These factories were established before 1870, and after that date the number rapidly increased. In 1868 the quantity of cheese exported from Canada was 6,141,570 lb. In 1904

cheese reached its maximum exportation with 233,980,716 lb., and the exports of cheese for the year ended March 31, 1924, amounted to 116,777,000 lb. The production of factory cheese in 1923 totalled 151,624,376 lb., of the value of \$28,645,192, an increase in quantity over the previous year of 11.6 p.c., and an increase in value of 31.2 p.c. (Table 28). The average prices per lb. were 19 cents in 1923 and 16 cents in 1922.

28.—Production and Value of Factory Cheese, by Provinces, 1921-1923.

Provinces.	1921.	1922.	1923.	1921.	1922.	1923.
	lb.	lb.	lb.	\$	\$	\$
Prince Edward Island.....	1,681,779	1,752,233	1,811,537	293,651	284,471	346,428
Nova Scotia.....	29,440	31,820	34,332	5,578	5,010	6,679
New Brunswick.....	1,100,382	926,052	825,369	203,941	147,503	161,497
Quebec.....	54,242,735	38,923,770	46,890,579	9,197,911	6,065,539	8,780,513
Ontario.....	103,432,696	92,707,059	99,556,415	18,676,380	15,036,980	18,846,197
Manitoba.....	255,829	102,354	231,530	47,341	16,747	47,191
Saskatchewan.....	22,659	12,448	118,920	4,209	2,026	22,061
Alberta.....	930,660	931,992	1,865,608	200,478	183,860	368,771
British Columbia.....	421,314	433,388	290,086	80,541	82,624	65,855
Total.....	162,117,494	135,821,116	151,624,376	28,710,030	21,824,760	28,645,192

Condensed Milk and Milk Powder.—Within recent years there has been a large increase in the production of condensed milk. The first milk-condensing plant was established at Truro, N.S., in 1883, and there are now in Canada 25 plants for the manufacture of condensed and evaporated milk and milk powder. The quantity of condensed milk made in Canada in 1923 was 27,118,581 lb., of the value of \$3,676,134, an increase in quantity of 5,877,501 lb., or 27.67 p.c. as compared with 1922. The quantity of evaporated milk made was 45,824,521 lb., valued at \$4,309,225, an increase in quantity of 13,431,951 lb. The quantity of milk powder and skim milk powder made in 1923 was 11,121,811 lb., valued at \$1,565,053. Of the 25 condenseries in operation in Canada in 1923, 21 were situated in Ontario, and to the total value of products of condenseries of \$13,714,978 Ontario contributed \$12,177,770. Table 29 shows the quantity and value of products other than butter and factory cheese for the years 1921, 1922 and 1923.

29.—Miscellaneous Products of Dairy Factories, 1921-1923.

Products.	1921.		1922.		1923.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		\$		\$		\$
Condensed milk.....lb.	38,997,936	5,837,787	21,241,090	2,388,319	27,118,581	3,676,134
Evaporated milk.....lb.	31,202,713	3,428,456	32,382,570	3,137,039	45,824,521	4,309,225
Milk powder.....lb.	1,703,496	554,918	1,430,466	456,371	1,325,189	405,743
Skim milk powder.....lb.	5,749,229	830,585	5,922,250	717,076	9,796,622	1,159,310
Sterilized milk.....lb.	6,696,264	719,009	150,000	11,000	-	-
Sterilized cream.....lb.	-	-	-	-	180,714	26,339
Skim condensed milk.....lb.	1,307,781	51,788	1,505,354	58,876	5,204,847	321,274
Condensed coffee and cocoa.....lb.	324,011	94,065	297,348	60,257	340,760	75,959
Whey butter.....lb.	1,337,404	431,114	1,140,386	345,946	1,279,797	386,356
Casein.....lb.	98,136	9,814	82,538	10,294	558,449	66,334
Ice cream.....gal.	3,007,337	3,967,918	2,771,925	3,669,504	2,789,524	3,514,046
Milk sold.....gal.	27,660,810	12,846,749	31,097,939	12,309,128	32,024,538	12,795,121
Cream sold..(lb. butter fat)	8,051,215	5,734,638	9,219,324	5,607,315	11,815,724	7,101,015
Buttermilk sold.....	-	300,278	-	269,276	-	291,912
Sundry.....	-	271,429	-	653,543	-	472,920
Total.....	-	35,078,548	-	29,694,004	-	34,601,688

Retrospective Statistics.—In Table 30 the production and value of creamery butter and factory cheese is compared by provinces and for all Canada for the years 1900, 1910 and 1915, and annually from 1920 to 1923. Table 31 shows the total value of all the products of dairy factories by provinces for the five years 1919 to 1923.

30.—Production and Value of Creamery Butter and Factory Cheese in Canada, by Provinces, 1900, 1910, 1915 and 1920-1923.

Provinces and Years.	Estab- lish- ments.	Creamery butter.		Factory cheese.	
		lb.	\$	lb.	\$
Canada	No.				
1900	3,576	36,066,739	7,240,972	220,833,269	22,221,430
1910	3,625	64,489,398	15,597,807	199,904,205	21,587,124
1915	3,513	83,991,453	24,385,052	183,887,837	27,097,176
1920	3,165	111,691,718	63,625,203	149,201,856	39,100,872
1921	3,121	128,744,610	48,135,439	162,117,494	28,710,030
1922	3,095	152,501,900	53,453,282	135,811,116	21,824,760
1923	3,007	162,834,608	56,873,510	151,624,376	28,645,192
Prince Edward Island					
1900	47	562,220	118,402	4,457,519	449,400
1910	45	670,908	156,478	3,293,755	354,378
1915	42	539,516	151,065	2,260,000	327,700
1920	37	1,166,032	674,744	2,081,277	525,635
1921	34	1,109,546	452,523	1,681,779	293,651
1922	33	1,262,006	449,303	1,752,233	284,471
1923	33	1,537,437	542,846	1,811,537	346,428
Nova Scotia					
1900	33	334,211	68,686	568,147	58,321
1910	18	354,785	88,481	264,243	29,977
1915	27	1,240,483	346,011	125,580	18,837
1920	26	2,503,188	1,518,757	52,638	14,865
1921	26	3,094,768	1,306,465	29,440	5,578
1922	25	3,329,246	1,244,958	31,820	5,010
1923	27	3,550,666	1,353,118	34,332	6,679
New Brunswick					
1900	68	287,814	58,589	1,892,686	187,106
1910	42	849,633	212,205	1,166,243	129,677
1915	43	776,416	231,838	1,165,651	168,086
1920	38	1,053,649	606,891	1,235,008	336,409
1921	38	1,152,168	475,112	1,100,382	203,941
1922	35	1,224,930	467,287	926,052	147,503
1923	32	1,231,471	456,557	825,369	161,497
Quebec					
1900	1,992	24,625,000	4,916,756	80,630,199	7,957,621
1910	2,143	41,782,678	9,961,732	58,171,091	6,165,254
1915	2,058	36,621,491	10,899,810	54,217,113	7,571,691
1920	1,509	41,632,511	23,580,949	52,162,777	13,372,250
1921	1,774	48,478,403	17,594,921	54,242,735	9,197,911
1922	1,752	57,258,470	20,024,039	38,923,770	6,065,539
1923	1,660	59,214,767	20,605,992	46,800,579	8,780,513
Ontario					
1900	1,336	7,559,542	1,527,935	131,967,612	13,440,987
1910	1,254	13,876,888	3,331,025	136,093,951	14,769,566
1915	1,164	26,414,110	7,534,653	125,001,136	18,831,413
1920	1,058	37,234,998	21,343,858	92,784,757	24,605,823
1921	1,059	43,471,532	16,680,247	103,432,696	18,676,380
1922	1,053	51,633,070	18,218,629	92,707,059	15,086,980
1923	1,014	54,873,180	19,478,505	99,556,415	18,846,197
Manitoba					
1900	69	1,557,010	292,247	1,289,413	124,025
1910	42	2,050,487	511,972	694,713	81,403
1915	59	5,839,667	1,693,503	726,725	109,008
1920	57	7,578,549	4,282,731	116,229	31,611
1921	51	8,541,095	3,253,057	255,829	47,341
1922	47	10,559,601	3,603,491	102,354	16,747
1923	57	10,730,060	3,662,444	231,530	47,191
Saskatchewan					
1900	5	143,645	29,362	6,000	868
1910	27	1,548,696	381,809	26,730	3,396
1915	29	3,811,014	1,055,000	-	-
1920	47	6,638,656	3,727,140	28,367	7,790
1921	56	7,030,053	2,552,698	22,659	4,209
1922	60	8,901,144	3,066,573	12,448	2,026
1923	66	10,867,010	3,632,377	118,920	22,061

30.—Production and Value of Creamery Butter and Factory Cheese in Canada, by Provinces, 1900, 1910, 1915 and 1920-1923—concluded.

Provinces and Years.	Estab-lish-ments.	Creamery Butter.		Factory Cheese.		
		No.	lb.	\$	lb.	\$
Alberta	1900	18	601,489	123,305	21,693	3,102
	1910	56	2,149,121	533,422	193,479	23,473
	1915	62	7,544,148	2,021,448	381,632	68,441
	1920	55	11,821,291	6,555,509	398,750	110,355
	1921	49	13,048,493	4,543,047	930,660	200,478
	1922	60	15,417,070	5,126,844	931,992	183,860
	1923	84	17,868,853	5,891,186	1,865,608	368,771
British Columbia	1900	8	395,808	105,690	-	-
	1910	9	1,206,202	420,683	-	-
	1915	29	1,204,598	451,724	10,000	2,000
	1920	84	2,062,844	1,334,624	342,053	96,134
	1921	84	2,818,552	1,227,409	421,314	80,541
	1922	80	2,916,183	1,252,158	433,388	82,624
	1923	31	2,961,164	1,250,485	290,086	65,855

31.—Total Value of All Products of Dairy Factories, by Provinces, 1919-1923¹.

Provinces.	1919.	1920.	1921.	1922.	1923.
	\$	\$	\$	\$	\$
Canada	135,196,602	146,336,491	111,924,017 ²	104,972,046	120,120,390
Prince Edward Island.....	1,184,163	1,252,013	786,696	793,819	950,095
Nova Scotia.....	1,974,269	2,517,338	1,517,870	1,917,033	2,325,825
New Brunswick.....	1,167,256	1,196,354	897,288	858,765	1,099,474
Quebec.....	36,790,037	37,732,572	26,796,939	26,089,578	29,386,505
Ontario.....	69,897,519	75,926,248	60,046,795	53,542,605	63,114,425
Manitoba.....	7,042,646	7,788,178	6,052,676	6,459,836	6,531,902
Saskatchewan.....	5,042,377	5,536,245	4,197,808	4,553,541	5,083,910
Alberta.....	7,872,541	8,838,298	6,522,814	6,831,470	7,971,211
British Columbia.....	4,225,794	5,549,245	3,977,820	3,925,399	3,657,043

¹ The total value of dairy products in 1901 and various subsequent years is shown in the "Statistical Summary of the Progress of Canada," immediately following the Table of Contents.

² Includes the sum of \$1,127,311, not apportioned by provinces.

Dairy Butter and Home-made Cheese.—The statistics of the foregoing tables relate entirely to the products of dairy factories. In addition, there is a large production of butter on farms, generally described as home-made or dairy butter, and a small production of home-made cheese. No annual statistics are collected of these products; the census of 1911, however, showed that the production of dairy butter in 1910 was 137,110,200 lb., value \$30,269,497, and of home-made cheese 1,371,092 lb., value \$154,088. According to the census of 1921 the production of dairy butter in 1920 was 103,487,506 lb., worth \$50,180,952, and of home-made cheese 533,561 lb., worth \$123,233. The production of dairy butter in 1923 is estimated at approximately 100 million lb., of the value of \$32,000,000, thus making the total estimated production of butter, including dairy butter, for 1923, 262,834,608 lb., valued at \$88,873,510.

Total Value of Dairy Products.—The total value of the dairy products of Canada in 1920 was estimated at \$276,480,386, including \$146,336,491, products of dairy factories, \$50,180,952 dairy butter, \$123,233 home-made cheese, \$4,319,081 ice-cream made in confectionery establishments, and \$75,520,579, the value of milk used whole as apart from that delivered to dairy factories. For 1923 the total is estimated at approximately \$238,693,885, comprising the products of dairy factories, \$120,120,390, dairy butter, \$32,000,000, confectioners' ice cream, \$3,840,476, and milk used whole as apart from that sold by the dairy factories, \$82,733,019.

6.—Fruit Production.

The wild fruits of Canada are numerous and varied. Currants, gooseberries, raspberries and strawberries grow wild almost as far north as the Arctic Circle, their flavour usually being unexcelled by that of cultivated varieties. The blueberry grows in great profusion over a large part of Eastern Canada, while the cranberry also is found over wide areas throughout the Dominion. Other wild fruits include the saskatoon or juneberry of the Prairie Provinces, the choke cherry, the pin or bird cherry, the buffalo berry, the blackberry, the salmon-berry and the cloudberry. Wild plums are found all through the eastern provinces and wild grapes as far north-westward as northern Manitoba.

Canadian climatic and soil conditions, moreover, are eminently fitted to the production of cultivated and improved varieties, and it is characteristic of the Canadian farm to find orchard or garden fruits produced for household needs, if not for sale as ordinary farm products. While commercial fruit growing is by no means restricted to a few large districts and is often a feature of agricultural production in suburban areas, a few districts nevertheless are noted as being the more important centres of fruit production. The Annapolis and adjacent valleys in Nova Scotia, the Niagara peninsula of Ontario and the Okanagan valley in British Columbia are perhaps outstanding, but the northern shore of lake Ontario, the Georgian Bay district, the areas adjacent to Montreal in Quebec, the lower British Columbia mainland and Vancouver island are also noted for their fruit crops.

The smaller fruits grown for sale generally find a market in nearby towns or cities, although many shipments are made from rural districts by rail or water to more distant centres of consumption. Apples, which are probably the most important Canadian fruit, meet with ready sale in British and European markets where their attractive appearance, flavour and good keeping qualities have gained a wide reputation. Practically all varieties of fruit are prepared in canneries located near the centres of production and are shipped to both domestic and foreign markets.

Origin and Growth of Fruit farming.—In Nova Scotia the apple-growing industry has assumed great importance, the bulk of the crop being exported to Great Britain. There are records of the growth of apples in Acadia from 1635. The census of 1698 showed that at Port Royal alone there were 1,584 apple trees distributed amongst 54 families, of whom many had orchards of from 75 to 100 trees. At Beaubassin, in 1698, the census showed 32 acres in fruit trees. The first apples exported from the province are said to have been shipped by sailing vessel from Halifax to Liverpool in 1849, the price realized being \$2 per barrel. In 1856 a shipment of 700 barrels was made by schooner to Boston, U.S.A., the price realized being \$2.75 per barrel. The first experimental commercial shipments of apples to England from the Annapolis valley were made in December, 1861, but proved disappointing. The first steamer to carry apples direct from Annapolis Royal to London was the "*Neptune*", which sailed on April 2, 1881. The shipment consisted of 6,800 barrels, and arrived in London in 14 days. This venture was fairly successful, and from that time the business has continued to increase in volume. Up to 1890, however, the production of apples in Nova Scotia rarely exceeded 100,000 barrels, but after that date there was a pronounced increase in acreage and production, and in 1909 the production reached a million barrels. A record crop of about 1,900,000 barrels was produced in 1911, when 1,734,876 barrels were marketed, and further records were made in 1919 when the gross crop exceeded two million

barrels, and in 1922, when 1,891,850 barrels were packed and sold from the Annapolis valley and adjacent valleys, which comprise a district of about 100 miles long by from six to eleven miles wide.

There are records to show that in 1663 apples were being produced in the province of Quebec, and it is here that the celebrated Fameuse apple is thought to have originated. The capabilities of this province for the production of apples of the finest appearance and best quality are very great; but at present there are not sufficient apples grown for the local demand, and large quantities are therefore annually imported.

In Ontario, where the commercial production of all descriptions of fruit capable of cultivation in Canada has reached its highest development, apples have been grown from the middle of the eighteenth century; but commercial orcharding has developed only within the past 50 or 60 years, and was only made possible when the building of the railways permitted trees and fruit to be transported rapidly. The great winter apple districts include the border of lake Ontario, extending back 30 miles and more from the lake, the shore of lake Huron and Georgian bay, several miles in depth, and the south-western part of the province. Farther east and north and including an area east of the lake Huron district, there are large areas of land where the hardier varieties of apples are most suitable. In the Niagara fruit-growing district, besides apples, peaches, pears, plums and cherries, small fruits and grapes are produced upon a large scale.

In British Columbia commercial fruit growing is of comparatively recent origin; but the development of commercial orcharding has been very rapid, especially during the last ten years. The first apple trees were planted about 1850, but not until after the completion of the Canadian Pacific railway in 1886 were there many trees planted for commercial purposes. The census of 1891 gave the area devoted to all kinds of fruit as 6,500 acres; in 1921 the census showed a total fruit acreage in the province of 43,569 acres. The most noted fruit district is the Okanagan valley, containing some of the finest orchards in the province or in the Dominion. The boxed apples from British Columbia are found in season on all the important markets in Great Britain and Europe. Pears, plums, peaches, apricots, cherries and small fruits are grown on a large scale.

The Fruit Marks Act, first passed by the Dominion Parliament in 1901, made the grading of commercial apples compulsory. In 1923 all previous legislation of this kind was replaced by the Fruit Act (13-14 Geo. V, c. 15) which provides for government inspection, imposes penalties for dishonest packing, and defines the grades under which the different descriptions of fruit shall be sold.

Census Statistics.—Statistics of the number of bearing and non-bearing fruit trees, collected at the census of 1921, are published in Table 32, together with comparative figures for 1911; from these it may be seen that only in peaches was there an increase during the decade in the number of bearing trees. Nevertheless, when the statistics of production of Table 33, also collected at the census, are consulted, there is evident a great increase since 1910 in the production of apples, peaches, plums and cherries. This may indicate that to-day fruit growing is on a much more scientific basis than in the past, and that the yield per bearing tree is larger because of the greater attention given to the selection of stock and the care of trees.

32.—Fruit Trees, bearing and non-bearing, together with average number per farm and per 100 acres of improved land, 1911 and 1921.

Kinds.	Trees, bearing.		Trees, non-bearing.		Trees per farm.		Trees per 100 acres improved land.	
	1911.	1921.	1911.	1921.	1911.	1921.	1911.	1921.
	No.	No.	No.	No.	No.	No.	No.	No.
Fruit Trees—								
Apple.....	10,617,372	9,802,218	5,599,804	2,649,740	—	17.51	—	17.57
Peach.....	839,288	1,021,709	1,056,359	174,513	—	1.68	—	1.69
Pear.....	581,704	501,586	385,538	172,304	—	0.95	—	0.95
Plum.....	1,075,130	985,267	637,220	266,889	—	1.76	—	1.77
Cherry.....	741,992	688,504	495,082	195,999	—	1.24	—	1.25
Other.....	146,659	—	141,233	—	—	—	—	—
Total.....	14,002,145	12,999,284	8,315,236	3,459,445	—	23.14	—	23.23

33.—Fruit production for all Canada, together with the average production per farm and per 100 acres of improved land, 1900, 1910 and 1920.

Kinds.	Total Production.			Average Production.					
	1900.	1910.	1920.	Per farm.			Per 100 acres improved land.		
				1900.	1910.	1920.	1900.	1910.	1920.
Orchard fruits—									
Apples.....bush.	18,626,186	10,618,666	17,475,414	34.23	14.87	24.57	61.75	21.79	24.66
Peaches.....“	545,415	646,826	1,076,223	1.00	0.90	1.51	1.81	1.33	1.52
Pears.....“	531,837	504,171	521,076	0.96	0.70	0.70	1.76	1.03	0.74
Plums.....“	557,875	508,994	808,369	1.02	0.71	1.14	1.85	1.05	1.14
Cherries.....“	336,751	238,974	502,447	0.61	0.33	0.71	1.11	0.49	0.71
All other.....“	70,396	47,789	—	0.13	0.07	—	0.23	0.09	—
Total.....“	20,668,460	12,565,420	20,383,489	37.95	17.58	28.63	68.51	25.78	28.77
Small fruits—									
Grapes.....lb.	24,302,634	32,898,438	33,269,412	44.62	46.03	46.79	80.56	67.50	46.94
Strawberries.....qt.	—	18,686,662	15,411,188	—	26.15	21.67	—	38.35	21.74
Raspberries.....“	—	1	8,378,718	—	1	11.78	—	1	11.82
Currants and gooseberries.....“	21,707,791	3,830,609	2,002,136	39.85	5.36	2.82	71.96	7.86	2.82
Other small fruits.....“	—	9,000,208	843,407	—	12.60	1.19	—	18.47	1.19

¹ Included with other small fruits.

Annual Statistics of Fruit Production.—For each of the five years 1919 to 1923, the Dominion Bureau of Statistics and the Fruit Branch of the Dominion Department of Agriculture have co-operated to collect and publish statistics (1) of the quantities and values of commercial apples produced in Canada and (2) of the varieties and values of fruit trees, bushes and plants sold by nurserymen in Canada. Table 34, following, shows the estimated production and value of commercial fruits in Canada for each of the four years, 1920-23. The statistics for 1920 are those of the census of 1921 and for the year 1920 the values given represent the prices received by the growers. For the other years, 1921, 1922 and 1923, the values given represent the average wholesale prices at different city markets, and not the prices received by the growers. To this extent, therefore, the values for 1920 are not comparable with those of the years 1921-23. The total value

to growers of the various kinds of fruit specified represents for the year 1920 a total of \$26,954,401. The total estimated value of the commercial fruit production, as computed from the average wholesale prices in the city markets, was for 1921, \$45,262,788, for 1922, \$33,899,121 and for 1923, \$33,169,343¹.

34.—Estimated Production and Value of Commercial Fruits in Canada, 1920-1923.

Years.	Total quantity.	Average price.	Total value.
	brl.	\$ cts.	\$
Apples—			
1920.....	5,828,632	2 58	15,016,607
1921.....	5,367,700	6 67	35,821,090
1922.....	5,048,405	4 90	24,692,182
1923.....	4,493,183	5 45	24,489,350
Pears—	bush.		
1920.....	520,330	1 38	715,776
1921.....	435,968	2 58	1,124,162
1922.....	461,227	1 45	668,854
1923.....	227,335	2 42	550,587
Plums and Prunes—			
1920.....	809,363	1 21	979,237
1921.....	575,575	1 47	844,412
1922.....	408,438	1 28	522,393
1923.....	348,482	2 00	696,964
Peaches—			
1920.....	1,077,195	1 19	1,281,632
1921.....	366,715	2 30	844,936
1922.....	577,561	1 56	904,325
1923.....	403,660	2 27	916,050
Apriquets—			
1921.....	31,205	-	-
1922.....	37,766	-	-
1923.....	32,850	-	-
Cherries—			
1920.....	485,128	2 38	1,153,429
1921.....	211,210	2 75	580,827
1922.....	202,740	2 38	481,850
1923.....	203,125	3 56	722,440
Strawberries—	qt.		
1920.....	15,658,346	0 19	2,977,041
1921.....	10,149,000	0 16	1,622,960
1922.....	8,678,200	0 18	1,526,050
1923.....	6,652,200	0 17	1,113,230
Raspberries—			
1920.....	8,360,518	0 23	1,962,681
1921.....	7,522,950	0 15	1,123,011
1922.....	6,271,725	0 18	1,159,287
1923.....	4,496,840	0 23	1,044,001
Other Berries—			
1920.....	2,827,241	0 19	539,138
1921.....	2,931,790	0 17	489,062
1922.....	2,837,549	0 15	428,757
1923.....	2,527,700	0 20	494,691
Grape—	lb.		
1920.....	33,269,412	0 07	2,328,860
1921.....	46,872,308	0 05	2,812,338
1922.....	70,308,462	0 05	3,515,423
1923.....	42,185,077	0 06	2,742,030

7.—Special Agricultural Crops.

Maple Sugar.—The making of maple sugar, which is confined entirely to the American continent, had a very early beginning, as before the advent of the white man, the Indian had learned to extract and concentrate the sap of the maple tree. On the approach of spring, the trees were gashed with the tomahawk, in a slanting direction, and beneath the opening was inserted a wooden chip or spout to direct the fluid, drop by drop, into receptacle resting on the ground. The sap was

¹ See Report on the Fruit Statistics of Canada, 1920-23, Dominion Bureau of Statistics, Ottawa, 1924.

caught in a birch-bark dish and boiled in earthen kettles. The small quantity of dark, thick syrup thus made was the only sugar available to the Indians, and is stated by early writers to have been highly prized. The first settlers learned from the Indians the art of maple sugar making and followed for perhaps a century their crude methods of manufacture, except for the substitution of iron or copper kettles for vessels of clay or bark. In the early days, before the timber acquired much value, the axe continued to be used for tapping the trees, and the sap was caught in wooden troughs and conveyed in buckets to a central point to be boiled. The boiling was done in large iron kettles suspended from a pole in the open woods, in a sheltered location but with no protection from the sun, rain, snow or the ashes, falling leaves, moss and bits of bark that were driven about by the wind. The products made by this crude method were strong in flavour, dark in colour and variable in quality. In the past 50 years, however, maple sugar making has become a rather highly organized commercial industry. An early improvement was the substitution of the auger for the axe in tapping, coopered buckets taking the place of the birch-bark "caso" or hewn sap trough, while the kettle gave way to the evaporating pan which has in late years developed into the modern evaporator with corrugated bottom and separate compartments. Not alone for the conservation of the life of the tree but also for cleanliness in sugar making, the wooden spout has almost disappeared in the most advanced sections; in fact, the present tendency is toward the use of metal in every article of equipment with which the sap, syrup or sugar comes in contact. The increasing cost of labour is being met by the ingenious inventor, who has provided facilities for taking full advantage of the law of gravitation in handling the fluid, which in a well equipped plant flows of its own accord from the collecting tank to the storage vat, thence to the evaporator and, when boiled to the proper consistency, into the receiving can. Indeed, when the profile of the sugar orchard will permit of it, pipe lines are made to conduct the sap from outlying collecting centres to the camps where evaporation takes place.¹

According to estimates made by the late Dr. Archibald Blue in 1912, the approximate average annual production of maple sugar from 1851 to 1911 was in millions of lbs. as follows: 1851-1861, 13.5; 1861-1871, 17.5; 1871-1881, 19; 1881-1891, 22.5; 1891-1901, 21.2; 1901-1911, 19.6.²

Annual statistics of maple products in Quebec have been collected since 1918, and Table 35 presents these statistics from that year until 1923.

35.—Production and Value of Maple Sugar and Maple Syrup in Quebec, 1918-1923.

Years.	Maple Sugar.			Maple Syrup.			Total Value of Sugar and Syrup.
	Quantity.	Average price per lb.	Value.	Quantity.	Average price per gallon.	Value.	
	lb.	\$	\$	gallons.	\$	\$	\$
1918.....	10,173,622	0.15	1,526,043	1,928,201	1.50	2,892,301	4,418,344
1919.....	12,353,667	0.25	3,088,417	1,470,275	2.25	3,675,687	6,396,435
1920.....	15,615,141	0.20	3,123,028	1,449,649	2.50	3,624,123	6,747,151
1921.....	12,285,514	0.15	1,842,827	1,375,635	1.80	2,476,143	4,318,970
1922.....	9,016,650	0.15	1,352,497	1,575,074	1.80	2,835,133	4,187,630
1923.....	8,215,975	0.15	1,232,396	1,250,650	1.80	2,251,170	3,483,566

In Table 36 are given approximate estimates of the commercial production and value of maple sugar and syrup in Canada by provinces, for the year 1924. These estimates are based upon the data collected through crop correspondents

¹ From "The Maple Sugar Industry in Canada," by J. B. Spencer, B.S.A., 3rd edition, Department of Agriculture, Ottawa, 1923. ² Census and Statistics Monthly, January, 1912 (Vol. 5, No. 44, p. 26).

and owners of large maple groves by the Dominion Bureau of Statistics and applied to the number of trees reported as tapped by the census of 1921. The table shows that for the whole of Canada the estimated production of maple sugar in 1924 was 9,385,415 lb. of the value of \$1,907,599, and of maple syrup 1,970,696 gallons of the value of \$4,083,542, the total value of sugar and syrup being \$5,991,141.

36.—Production and Value of Maple Sugar and Maple Syrup in Canada, 1924.

Provinces.	Maple Sugar.			Maple Syrup.			Total Value of Sugar and Syrup.
	Quantity.	Average price per lb.	Value.	Quantity.	Average price per gallon.	Value.	
	lb.	\$	\$	gallons.	\$	\$	\$
Canada	9,385,415	0-20	1,907,599	1,970,696	2-07	4,083,542	5,991,141
Nova Scotia.....	51,500	0-34	17,510	9,565	2-64	25,252	42,762
New Brunswick.....	50,110	0-34	17,037	10,649	2-57	27,368	44,405
Quebec.....	8,876,525	0-20	1,775,305	1,176,656	1-90	2,235,646	4,010,951
Ontario.....	407,280	0-24	97,747	773,826	2-32	1,795,276	1,893,023

Sugar Beets and Beetroot Sugar.—The earliest attempts to establish a beet-sugar industry in Canada were made about 35 years ago, and for some time large beet sugar factories were operated at Farnham, Coaticook and elsewhere in the province of Quebec under a system of bounties from the Dominion Government. Annual experiments at the Ontario Agricultural College, from about the year 1889, demonstrated the suitability of the soil and climate of Ontario for the production of beetroots with sugar percentage and coefficient of purity practically equal to those grown on the continent of Europe. Choosing localities with the other necessary requisites of abundant water, transportation facilities and a plentiful supply of labour, four beet sugar companies began operations in 1902 with the aid of a bounty provided by Act of the Ontario Legislature, bonuses voted by the rate-payers of Dresden (\$40,000) and Wallaceburg (\$30,000) and customs concessions from the Dominion Government for the importation of machinery. These companies were the Ontario Sugar Co., Ltd., of Berlin (now Kitchener), the Dresden Sugar Co., Ltd., the Wallaceburg Sugar Co. and the Wiarton Beet Sugar Manufacturing Co., Ltd. From 1903 to 1914, when it went out of business, there was also in operation the Knight Sugar Co., at Raymond, Alberta. In this province, bounties for sugar beets were provided by the Alberta Government for the five years ended 1910. During the first four years, the tonnage of Canadian-grown beets increased from 51,067 in 1902 to 118,095 in 1905, and the value of sugar from \$385,678 to \$1,045,288. In the same period \$1,442,961 were paid to farmers for beets, \$525,045 to employees for wages, and the value of the sugar manufactured was \$2,728,853.¹ The bonus of the Ontario Government was $\frac{1}{2}$ a cent per lb., and was paid from 1903 to 1907, when it expired. In 1909, when the Ontario beet sugar industry had been seven years in operation, only the two factories at Wallaceburg, Ontario, and Raymond, Alberta, were active. The Wiarton factory was closed after two seasons, the Dresden factory had been dismantled and the plant removed to Wisconsin, U.S.A., and the Berlin factory was idle pending reorganization. Eventually in 1909, three factories situated at Chatham, Wallaceburg and Kitchener came under the control of the Dominion Sugar Co., Ltd., of Chatham, but during the last four years (1921-1924) only the two factories at Chatham and Wallaceburg have been in operation.²

¹ Canada Year Book, 1905, pp. xxiii-xxiv.

² These notes are derived partly from an article on "The Beet Sugar Industry in Canada," *Labour Gazette*, April 1903, pp. 762-771, and Bulletin IX "The Beet Sugar Industry", Census and Statistics Office, Ottawa, 1909.

37.—Area, Yield and Value of Sugar Beets in Canada and Production of Refined Beetroot Sugar, 1911-1923.

Years.	Acres grown.	Yield per acre.	Total yield.	Average price per ton.	Total ^a value.	Production of refined beetroot sugar.
	acres.	tons.	tons.	\$ cts.	\$	lb.
1911.....	20,677	8.50	175,000	6 59	1,154,000	21,329,689
1912.....	18,900	10.50	201,000	5 00	1,005,000	26,767,287
1913.....	17,000	8.75	148,000	6 12	906,000	26,149,216
1914.....	12,100	9.00	108,600	6 00	651,000	31,314,763
1915.....	18,000	7.75	141,000	5 50	775,500	39,515,802
1916.....	15,000	4.75	71,000	6 20	440,000	17,024,377
1917.....	14,000	8.40	117,600	6 75	793,800	23,376,850
1918.....	18,000	11.25	204,000	12 71	2,593,715	50,092,835
1919.....	18,800	9.50	180,000	14 61	2,630,027	37,839,271
1920.....	34,491	9.94	343,000	15 47	5,307,243	89,280,719
1921.....	25,535	7.80	199,334	9 90	1,974,384	52,862,377
1922.....	14,955	8.55	127,807	7 56	966,521	29,911,770
1923.....	17,941	8.87	159,200	12 08	1,922,668	39,423,160

At the estimated average wholesale price of 9½ cents per lb., the total value of the beetroot sugar produced in 1923 is \$3,745,200, as compared with 5½ cents per lb. and \$1,645,885 total value in 1922, and 6.7 cents per lb. and \$3,554,203 total value in 1921.

The estimated production of sugar beets in the principal beet-sugar producing countries of the world was, in 1923, 45.5 million short tons from 4,721,100 acres. The production in 1923 of the largest beet-growing countries was, in thousands of tons as follows: Germany 9,586; the United States 6,893; Czecho-Slovakia 6,641; France 4,060; Italy 2,976; Poland 2,838; Belgium 2,245; Holland 1,896; Spain 1,345 and Sweden 1,148.

Tobacco.—According to the census, the total Canadian area under tobacco in 1921 was 16,621 acres, as compared with 36,891 acres in 1920, and the total production in 1920 was 32,660,061 lb. of the value of \$4,375,596. Of the 1920 total, 19,279,246 lb., of the value of \$2,615,388, were produced upon 19,621 acres in Ontario, and 13,365,519 lb., of the value of \$1,758,213, were produced upon 17,252 acres in Quebec. Of the total area in 1921, viz., 16,621 acres, 6,663 acres were grown in Ontario and 9,958 acres in Quebec.

Taking only the totals for both provinces, Table 38 shows the results of 1923, as compared with 1921 and 1922.

38.—Estimated Area and Yield of Tobacco in Ontario and Quebec, 1921-1923.

Provinces.	1921.	1922.	1923.	1921.	1922.	1923.	1921.	1922.	1923.
	acres.	acres.	acres.	lb.	lb.	lb.	lb. per acre.	lb. per acre.	lb. per acre.
Ontario.....	6,553	9,189	8,630	7,121,962	11,031,870	10,797,000	1,091	1,201	1,251
Quebec.....	5,256	16,573	15,302	6,127,000	14,915,700	10,500,000	1,166	900	680
Totals and averages.....	11,809 ¹	25,762	23,932	13,248,962	25,947,570	21,297,000	1,124	1,007	890

¹ Annual estimate. The census figure is 16,621 acres for the two provinces.

It is estimated that the average price for Ontario tobacco of the season of 1923 is 18 cents per lb., this being based upon an average of 30 cents per lb. for flue-cured tobacco and 8 cents per lb. for White Burley. The total value of the Ontario crop may therefore be estimated at \$1,943,500 (10,797,000 lb. at 18 cents per lb.), as compared with \$2,757,967 in 1922 (11,031,870 lb. at 25 cents per lb.). For Quebec the all-round average price is placed at 15 cents per lb., representing a total for the province of \$1,575,000 (10,500,000 lb. at 15 cents), as compared with \$1,789,884 in 1922 (14,915,700 lb. at 12 cents per lb.). The total value for Canada (i.e., the two tobacco growing provinces of Quebec and Ontario) is, therefore, for 1923, \$3,518,500 (21,297,000 lb. at 16 cents per lb.), as compared with \$4,547,851 (25,947,570 lb. at 17 cents per lb.) in 1922.

Onions.—Table 39 shows the area and commercial production of onions in Canada for each of the years 1920 to 1923, as estimated by the Fruit Branch of the Department of Agriculture.

39.—Area and Production of Commercial Onions in Canada, 1920-1923.

Provinces.	1920.		1921.		1922.		1923.	
	acres.	tons.	acres.	tons.	acres.	tons.	acres.	tons.
Quebec.....	900	8,100	750	5,250	750	6,000	600	3,600
Ontario.....	1,550	13,950	1,375	9,625	1,807	16,263	1,807	9,250
British Columbia.	1,450	13,050	720	5,075	1,078	8,624	948	8,500
Total.....	3,900	35,100	2,845	19,915	3,635	30,887	3,355	21,350

8.—Farm Labour and Wages.

Average Wages of Farm Help.—On the whole the average wages of farm help showed a slight advance for 1923, as compared with 1922. For Canada, the average wages per month of farm helpers during the summer season of 1923, including board, were for men \$61, as against \$59 in 1922, and for women \$39, the same as in 1922. The value of the board was returned the same as for 1922, viz., \$21 for men and \$17 for women. By the year, the average wages for males, including board, was \$611 in 1923, as compared with \$594 in 1922, and \$422 for women, as compared with \$418 in 1922. The value of the yearly board was returned as \$239 for men, as against \$235 in 1922, and for women \$191 for both years. By provinces, the average monthly wages for men and women respectively in the summer season, including board, were in 1923 as follows, the figures for 1922 being given within parentheses for comparison: Prince Edward Island \$43 and \$28 (\$40 and \$27); Nova Scotia \$56 and \$32 (\$50 and \$29); New Brunswick \$59 and \$32 (\$53 and \$32); Quebec \$59 and \$32 (\$53 and \$29); Ontario \$59 and \$39 (\$57 and \$37); Manitoba \$62 and \$42 (\$63 and \$43); Saskatchewan \$65 and \$44 (\$64 and \$46); Alberta \$70 and \$48 (\$64 and \$45); British Columbia \$76 and \$53 (\$75 and \$54).

In Table 40 the value of wages and board is given for the years 1914, 1920-23, both for the summer season and for the year, distinction being made in all cases between wages and board.

40.—Average Wages of Farm Help in Canada, as estimated by Crop Correspondents, 1914, 1920-1923.

Provinces.	Years.	Per month in summer season.						Per year.					
		Wages.		Board.		Wages and Board.		Wages.		Board.		Wages and Board.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Canada.....	1914	21	8	14	11	36	19	155	57	168	132	323	189
	1920	60	27	26	20	86	47	543	275	278	217	821	492
	1921	45	24	22	18	67	42	421	249	248	200	669	449
	1922	38	22	21	17	59	39	359	227	235	191	594	418
	1923	40	22	21	17	61	39	372	231	239	191	611	422
P. E. Island....	1914	15	5	10	8	25	13	101	40	120	96	221	136
	1920	42	18	18	14	60	32	371	212	201	160	572	272
	1921	29	15	16	12	45	27	282	151	178	136	460	287
	1922	26	15	14	12	40	27	247	165	168	130	415	295
	1923	28	16	15	12	43	28	302	173	170	136	472	309
Nova Scotia....	1914	20	7	11	8	31	15	169	59	132	96	301	155
	1920	49	21	24	17	73	38	472	218	263	190	735	408
	1921	36	17	20	14	56	31	364	182	228	170	592	352
	1922	31	16	19	13	50	29	327	177	209	150	536	327
	1923	36	18	20	14	56	32	328	182	227	158	555	340
New Brunswick	1914	21	7	11	8	32	15	170	69	132	96	302	165
	1920	56	19	23	16	79	35	531	213	254	178	785	391
	1921	35	17	19	14	54	31	361	183	214	149	575	332
	1922	34	17	19	15	53	32	328	168	192	149	520	317
	1923	41	18	18	14	59	32	415	209	200	155	615	364
Quebec.....	1914	21	7	13	9	34	16	140	44	156	108	296	152
	1920	62	24	24	16	86	40	524	235	243	172	767	407
	1921	39	18	19	14	58	32	360	193	199	142	559	335
	1922	35	17	18	12	53	29	322	176	188	130	510	306
	1923	40	19	19	13	59	32	356	194	203	140	559	334
Ontario.....	1914	19	7	13	10	32	17	141	52	156	120	297	172
	1920	52	25	23	19	75	44	474	259	262	211	736	470
	1921	40	22	20	16	60	38	382	233	227	185	609	418
	1922	37	21	20	16	57	37	348	225	221	172	569	397
	1923	38	22	21	17	59	39	364	238	233	189	597	427
Manitoba.....	1914	24	9	15	13	39	22	184	70	180	156	364	226
	1920	70	34	28	24	98	58	650	312	325	247	975	559
	1921	53	28	26	22	79	50	503	303	295	249	798	552
	1922	40	24	23	19	63	43	381	250	259	221	640	471
	1923	40	23	22	19	62	42	372	243	259	216	631	459
Saskatchewan..	1914	24	9	17	14	41	23	162	67	204	168	366	235
	1920	72	35	30	25	102	60	667	364	336	289	1,003	653
	1921	54	29	26	29	80	51	498	302	297	254	795	556
	1922	40	25	24	21	64	46	398	267	275	235	673	502
	1923	42	24	23	20	65	44	382	256	270	228	652	484
Alberta.....	1914	24	10	16	14	40	24	173	68	192	168	365	236
	1920	76	36	31	26	107	62	697	360	341	278	1,038	638
	1921	52	31	26	23	78	54	463	318	283	248	746	566
	1922	41	24	23	21	64	45	367	248	261	234	628	482
	1923	46	27	24	21	70	48	432	268	272	238	704	506
British Colum- bia.	1914	27	13	21	18	48	31	208	108	252	216	460	324
	1920	64	36	31	27	95	63	684	431	349	311	1,033	742
	1921	52	31	27	23	79	54	552	353	303	260	855	613
	1922	47	30	28	24	75	54	526	342	323	294	849	636
	1923	50	30	26	23	76	53	481	360	294	280	775	640

NOTE.—M = Males; F = Females.

9.—Prices of Agricultural Produce.

In Tables 41 and 42 will be found the monthly average cash prices at Winnipeg of Canadian wheat, also of barley, oats and flaxseed, basis in store Fort William-Port Arthur, for the years 1914 and 1921-23. The monthly range of the average prices of Canadian wheat and oats in British markets is given for 1913 and for 1921-23 in Table 43, and the yearly average prices of British grown wheat, barley and oats in the home market is furnished in Table 44; in both tables English weights and measures are converted into their Canadian equivalents and English currency is converted into Canadian at the par rate of exchange. Table 45 gives the monthly average prices of flour, bran and shorts at principal markets in 1923, Table 46 the average prices of Canadian live stock at principal markets for the three years 1921 to 1923 and Table 47 the average monthly prices of selected descriptions of Canadian live stock at principal markets in 1923. The latter is an abridgment of the more detailed classification appearing in the Monthly Bulletin of Agricultural Statistics.

Tables 48 and 49 deal with the prices of clover and grass seeds in recent years, while an index number of producers' prices of field crops is furnished in Table 50, which is illustrated by a diagram showing the great fluctuations during the war and reconstruction periods in the prices paid to the farmer for his products.

41.—Monthly Range of Average Cash Prices of Canadian Wheat at Winnipeg, basis in store Fort William-Port Arthur, 1914 and 1921-1923.

SOURCE: Board of Grain Commissioners for Canada, Fort William, Ont.

Date.	No. 1 Northern.	No. 2 Northern.	No. 3 Northern.	No. 4.	No. 5.	No. 6.	Feed.
	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.
Averages for—							
January 1914...	0.84½-0.85½	0.82½-0.83½	0.80-0.81½	0.74½-0.76	0.68½-0.69½	0.64½-0.64½	0.58½-0.59½
" 1921...	1.89½-1.99½	1.86½-1.96½	1.80½-1.90½	1.73½-1.82½	1.59½-1.68½	1.46½-1.54½	1.37½-1.45½
" 1922...	1.11½-1.15½	1.06½-1.11	0.97½-1.01½	0.92½-0.95½	0.85½-0.88½	0.77½-0.80½	0.71½-0.74½
" 1923...	1.07½-1.09	1.06-1.07	1.03½-1.05½	0.98½-1.00½	0.91½-0.93½	0.84½-0.86½	0.75½-0.77½
February 1914...	0.88½-0.89½	0.86½-0.87½	0.84½-0.86	0.80½-0.81½	0.73-0.74½	0.68-0.69½	0.62½-0.63½
" 1921...	1.83-1.91	1.80-1.88½	1.75½-1.84½	1.70½-1.78½	1.58½-1.67	1.41½-1.49	1.30½-1.38½
" 1922...	1.29½-1.34	1.25½-1.29½	1.17½-1.22½	1.11½-1.15½	1.03-1.07½	0.96½-1.00½	0.90½-0.94½
" 1923...	1.09½-1.11½	1.08-1.09½	1.05½-1.07½	1.00½-1.02½	0.93½-0.95½	0.86½-0.88½	0.77½-0.79½
March 1914...	0.90-0.90½	0.88½-0.89½	0.86½-0.87½	0.82½-0.83½	0.79½-0.80½	0.74½-0.75½	0.69½-0.70½
" 1921...	1.88½-1.93½	1.85½-1.90½	1.81½-1.86½	1.74½-1.79½	1.65½-1.71½	1.49-1.54½	1.38½-1.45½
" 1922...	1.39-1.45	1.34½-1.40½	1.26-1.31½	1.17-1.23½	1.06-1.12½	0.98-1.02½	0.92½-0.99½
" 1923...	1.11½-1.13½	1.09½-1.11½	1.06½-1.08½	1.01½-1.03	0.94½-0.96½	0.87½-0.89½	0.79½-0.81½
April 1914...	0.88½-0.90½	0.87½-0.88½	0.85½-0.86½	0.82½-0.83½	0.78½-0.79½	0.73½-0.74½	0.68½-0.69½
" 1921...	1.72½-1.84½	1.67-1.80	1.63-1.75½	1.51½-1.62½	1.43½-1.54½	1.29½-1.39	1.23-1.33½
" 1922...	1.39½-1.44½	1.34½-1.39½	1.26½-1.31½	1.17½-1.22	1.07½-1.11	0.97½-1.01	0.90½-0.95½
" 1923...	1.19-1.22	1.17½-1.20½	1.14½-1.17½	1.09-1.12½	1.04-1.08½	0.97½-1.01½	0.91½-0.95½
May 1914...	0.93-0.94½	0.91½-0.93½	0.89½-0.91½	0.85½-0.87½	0.79½-0.79½	0.74½-0.74½	0.69½-0.69½
" 1921...	1.81½-1.89½	1.78½-1.86½	1.73½-1.82½	1.58½-1.70½	1.46½-1.56½	1.31½-1.39½	1.30½-1.34
" 1922...	1.42½-1.47	1.37½-1.42½	1.30½-1.35½	1.17-1.21½	1.06½-1.10	0.94½-0.97½	0.82½-0.86½
" 1923...	1.17-1.19	1.15½-1.17½	1.12½-1.14½	1.08½-1.10½	1.03½-1.05½	0.97½-0.99½	0.92½-0.94½
June 1914...	0.91½-0.93½	0.90½-0.92½	0.89-0.90½	0.84½-0.86½	0.80½-0.80½	0.75½-0.75½	0.70½-0.70½
" 1921...	1.85½-1.92½	1.83½-1.89½	1.78½-1.83½	1.69½-1.74½	1.57½-1.62½	1.41-1.42½	—
" 1922...	1.31½-1.35½	1.27½-1.31	1.17½-1.20½	1.05½-1.09½	0.96-1.00½	0.84½-0.84½	0.76½-0.80½
" 1923...	1.13-1.16½	1.11½-1.15½	1.08½-1.12½	1.04-1.07½	1.00½-1.04½	0.94½-0.98½	0.87½-0.91½
July 1914...	0.89-0.90½	0.87½-0.89	0.85½-0.86½	0.80½-0.83½	—	—	—
" 1921...	1.79½-1.85½	1.76½-1.83	1.73-1.79½	1.59½-1.63½	1.39½-1.39½	1.28½-1.30½	1.15½-1.15½
" 1922...	1.34½-1.38½	1.30½-1.34½	1.19½-1.23½	1.06-1.10	0.97-1.01½	0.87½-0.91½	0.79½-0.84½
" 1923...	1.07½-1.10½	1.05-1.08½	1.00½-1.04	0.93½-0.98	0.89½-0.94	0.83½-0.88½	0.73½-0.78½
August 1914...	1.01½-1.10½	0.99½-1.08½	0.94½-1.03½	0.90½-0.93½	0.81½-0.93½	—	—
" 1921...	1.76½-1.87½	1.72½-1.80½	1.64½-1.73½	1.46½-1.54	1.31½-1.38½	1.17½-1.22½	1.02-1.05½
" 1922...	1.18½-1.25½	1.12½-1.16½	1.07½-1.11½	0.93½-0.96½	0.80½-0.84½	0.73-0.76½	0.63½-0.66½
" 1923...	1.09½-1.13½	1.04½-1.08½	0.81½-1.05½	0.91½-0.93½	0.83-0.85½	0.76½-0.79½	0.63½-0.67½

41.—Monthly Range of Average Cash Prices of Canadian Wheat at Winnipeg, basis in store Fort William-Port Arthur, 1914 and 1921-1923—concluded.

Date.	No. 1 Northern.		No. 2 Northern.		No. 3 Northern.		No. 4.		No. 5.		No. 6.		Feed.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
September 1914	1 09½	-1.15½	1 06½	-1.12½	1.03	-1.08½	0.97½	-1.02½	0 90½	-0.95½	0.87½	-0.84½	0.78½	-0.79½
" 1921	1 46½	-1.59½	1 41½	-1.54½	1.37½	-1.48½	1.28½	-1.36½	1 16½	-1.22½	1 04½	-1.10½	0 95½	-0.99½
" 1922	0 98½	-1.03	0 97½	-1.01½	0 94	-0.98½	0.87½	-0.90½	0 80½	-0.83½	0 71½	-0.74½	0 61½	-0.64½
" 1923	1.06½	-	1.02	-	0.98½	-	0.90½	-	0.81	-	0.71	-	0 64½	-
October 1914	1 10	-1.13½	1 06½	-1.09½	1.01½	-1.04½	0 95½	-0.99	0 91	-0.94½	0 86½	-0.89½	0 81½	-0.85½
" 1921	1 15½	-1.23½	1 13½	-1.21	1.09½	-1.16½	1 03½	-1.10½	0 94½	-1.01½	0 85	-0.91½	0 75	-0.81½
" 1922	0 98½	-1.02½	0 97½	-1.01½	0 93½	-0.97½	0 89½	-0.93½	0 83½	-0.86½	0 76½	-0.80	0 64½	-0.68½
" 1923	0.97½	-	0.95½	-	0.90½	-	0.84½	-	0.78½	-	0.70½	-	0 66½	-
November 1914	1 17½	-1.20½	1 14½	-1.17½	1 09½	-1.12½	1 04½	-1.07½	1.00½	-1.02½	0.95	-0.98½	0.90½	-0.94
" 1921	1 08	-1.13	1 05	-1.10½	0 99½	-1.04½	0 94½	-0.99	0 86½	-0.91½	0 78½	-0.83½	0 69½	-0.74½
" 1922	1 07½	-1.10½	1 05½	-1.09½	1 02½	-1.06½	0 96½	-0.99½	0 92	-0.95½	0 85½	-0.89½	0 75½	-0.78½
" 1923	0.97½	-	0.94½	-	0.89½	-	0.82	-	0.75½	-	0.71½	-	0 69½	-
December 1914	1 17½	-1.19½	1 14½	-1.16½	1 09½	-1.11½	1 05½	-1.07½	1.00½	-1.03½	0 96½	-0.98½	0 92	-0.94
" 1921	1 11½	-1.16½	1 05½	-1.10½	0 99½	-1.04	0 92½	-0.96½	0 83½	-0.87½	0 75½	-0.78½	0 63	-0.71½
" 1922	1 08	-1.11	1 05½	-1.08½	1 02½	-1.06	0 93½	-1.00½	0 92½	-0.94½	0 85½	-0.87½	0 76½	-0.78½
" 1923	0.93½	-	0.90½	-	0.85½	-	0.78	-	0.70	-	0.68	-	0 66	-

42.—Monthly Range of Average Cash Prices of Barley, Oats and Flaxseed at Winnipeg, basis in store Fort William-Port Arthur, 1914 and 1921-1923.

Source: Board of Grain Commissioners for Canada, Fort William, Ontario.

Date.	Barley (per bushel of 48 lb.)		Oats (per bushel of 34 lb.)					Flaxseed (per bushel of 56 lb.)				
	No. 3 C.W.		No. 2 C.W.	No. 3 C.W.	No. 1 Feed.	No. 2 Feed.	No. 1 N.C.W.	No. 2 C.W.	No. 3 C.W.			
Averages for—	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Jan.—												
1914.	0 38	-0.41½	0 32½	-0.33½	0 31½	-0.31½	0 30½	-0.30½	1.25½	-1.27½	1.22½	-1.24½
1921.	0 88	-0.93	0 50½	-0.52	0 47	-0.49	0 42½	-0.47½	1.94	-2.05½	1 90	-2.01½
1922.	0 52½	-0.57	0 42½	-0.43	0 39½	-0.40	0 37	-0.38½	1.75½	-1.82	1 71½	-1.77½
1923.	0 54½	-0.55	0 46½	-0.47½	0 42	-0.42	0 39½	-0.40½	2.13½	-2.16½	2.06½	-2.10½
Feb.—												
1914.	0 39½	-0.43½	0 33½	-0.34	0 33½	-0.33½	0 32½	-0.32½	1.29½	-1.31½	1.26½	-1.28½
1921.	0 80	-0.84	0 47½	-0.50	0 43½	-0.45	0 41½	-0.43½	1.76½	-1.85	1 72½	-1.81
1922.	0 59½	-0.61	0 47½	-0.48	0 44½	-0.45½	0 43	-0.44½	2.15½	-2.27½	2 11	-2.22½
1923.	0 54½	-0.55	0 47½	-0.48	0 43½	-0.44	0 41½	-0.42½	2.29½	-2.37½	2.26½	-2.34½
Mar.—												
1914.	0 43½	-0.45½	0 34½	-0.34½	0 34½	-0.34½	0 34	-0.34½	1.34½	-1.37½	1.32½	-1.34½
1921.	0 81½	-0.85	0 48½	-0.49	0 43½	-0.44	0 42½	-0.42½	1.74½	-1.78½	1.70½	-1.74½
1922.	0 64	-0.66	0 49½	-0.51	0 44½	-0.46	0 43½	-0.45½	2.33½	-2.38½	2 28½	-2.33½
1923.	0 55	-0.55½	0 49½	-0.50	0 43½	-0.44½	0 42½	-0.43½	2.40	-2.45½	2.35½	-2.41
April—												
1914.	-	-	0 34½	-0.35	0 33½	-0.34	0 33	-0.33½	1.34½	-1.37	1 31½	-1.34
1921.	0 74½	-0.78½	0 42½	-0.43	0 37½	-0.40	0 35½	-0.38½	1.46½	-1.58½	1 42	-1.53½
1922.	0 65½	-0.67	0 49	-0.51	0 44½	-0.46	0 43½	-0.45½	2.29½	-2.38	2 25½	-2.35½
1923.	0 57½	-0.58½	0 51½	-0.53	0 47½	-0.48½	0 46½	-0.47½	2.77½	-2.91½	2.72½	-2.86½
May—												
1914.	0 43½	-0.48½	0 37½	-0.37½	0 35½	-0.36½	0 35½	-0.35½	1.35½	-1.37	1.32½	-1.34
1921.	0 75½	-0.79	0 43½	-0.46	0 39½	-0.42	0 37½	-0.40	1.64½	-1.73½	1.60	-1.69½
1922.	0 67½	-0.69½	0 53½	-0.55½	0 50½	-0.52½	0 48½	-0.48½	2.46½	-2.47½	2.40	-2.43½
1923.	0 55½	-0.57	0 49½	-0.50½	0 46½	-0.47½	0 44½	-0.45½	2.41½	-2.57	2.37½	-2.53
June—												
1914.	0 47½	-0.53½	0 38½	-0.39½	0 38½	-0.38½	0 37½	-0.38	1.38½	-1.40	1.35½	-1.37
1921.	0 77½	-0.80	0 47½	-0.49	0 43	-0.44½	0 40½	-0.42	1.77½	-1.84	1.73½	-1.80
1922.	0 64½	-0.66½	0 51½	-0.53½	0 49	-0.51	0 46½	-0.48½	2.29½	-2.41½	2.25½	-2.34½
1923.	0 52½	-0.53½	0 47½	-0.48½	0 44½	-0.46½	0 43½	-0.44½	2.28½	-2.39½	2.24½	-2.35½

42.—Monthly Range of Average Cash Prices of Barley, Oats and Flaxseed at Winnipeg, basis in store Fort William-Port Arthur, 1914 and 1921-1923—concluded.

Date.	BARLEY (per bushel of 48 lb.)	OATS (per bushel of 34 lb.)					FLAXSEED (per bushel of 56 lb.)		
		No. 3 C.W.	No. 2 C.W.	No. 3 C.W.	No. 1 Feed.	No. 2 Feed.	No. 1 N.C.W.	No. 2 C.W.	No. 3 C.W.
Averages for— July—	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.
1914.	0.46 $\frac{1}{2}$ -0.52 $\frac{1}{2}$	0.38 $\frac{1}{2}$ -0.39 $\frac{1}{2}$	0.37 $\frac{1}{2}$ -0.38	0.36 $\frac{1}{2}$ -0.37	0.36 $\frac{1}{2}$ -0.37	1.40 $\frac{1}{2}$ -1.46 $\frac{1}{2}$	1.37 $\frac{1}{2}$ -1.43 $\frac{1}{2}$	1.26 -1.33	
1921.	0.78 $\frac{1}{2}$ -0.82 $\frac{1}{2}$	0.49 $\frac{1}{2}$ -0.52 $\frac{1}{2}$	0.47 -0.49 $\frac{1}{2}$	0.44 $\frac{1}{2}$ -0.47 $\frac{1}{2}$	0.43 $\frac{1}{2}$ -0.46 $\frac{1}{2}$	1.86 $\frac{1}{2}$ -1.93 $\frac{1}{2}$	1.82 $\frac{1}{2}$ -1.89 $\frac{1}{2}$	1.56 $\frac{1}{2}$ -1.63 $\frac{1}{2}$	
1922.	0.64 -0.65 $\frac{1}{2}$	0.50 $\frac{1}{2}$ -0.51 $\frac{1}{2}$	0.47 $\frac{1}{2}$ -0.48 $\frac{1}{2}$	0.45 $\frac{1}{2}$ -0.46 $\frac{1}{2}$	0.42 $\frac{1}{2}$ -0.44	2.38 $\frac{1}{2}$ -2.43 $\frac{1}{2}$	2.34 $\frac{1}{2}$ -2.38 $\frac{1}{2}$	2.14 $\frac{1}{2}$ -2.21 $\frac{1}{2}$	
1923.	0.49 $\frac{1}{2}$ -0.51 $\frac{1}{2}$	0.44 $\frac{1}{2}$ -0.45 $\frac{1}{2}$	0.41 $\frac{1}{2}$ -0.43 $\frac{1}{2}$	0.39 $\frac{1}{2}$ -0.41 $\frac{1}{2}$	0.38 $\frac{1}{2}$ -0.40 $\frac{1}{2}$	2.19 $\frac{1}{2}$ -2.28 $\frac{1}{2}$	2.15 $\frac{1}{2}$ -2.24 $\frac{1}{2}$	1.89 $\frac{1}{2}$ -2.01 $\frac{1}{2}$	
Aug.—									
1914.	0.51 $\frac{1}{2}$ -0.57 $\frac{1}{2}$	0.44 $\frac{1}{2}$ -0.44 $\frac{1}{2}$	0.43 $\frac{1}{2}$ -0.46	0.42 -0.43 $\frac{1}{2}$	0.42 -0.44 $\frac{1}{2}$	1.36 $\frac{1}{2}$ -1.46 $\frac{1}{2}$	1.34 $\frac{1}{2}$ -1.43 $\frac{1}{2}$	1.31 -1.52	
1921.	0.76 $\frac{1}{2}$ -0.79 $\frac{1}{2}$	0.47 $\frac{1}{2}$ -0.50	0.47 -0.49	0.46 -0.48 $\frac{1}{2}$	0.44 $\frac{1}{2}$ -0.46 $\frac{1}{2}$	1.96 -2.04 $\frac{1}{2}$	1.92 $\frac{1}{2}$ -2.01	1.66 -1.73 $\frac{1}{2}$	
1922.	0.55 $\frac{1}{2}$ -0.58 $\frac{1}{2}$	0.44 $\frac{1}{2}$ -0.47 $\frac{1}{2}$	0.40 $\frac{1}{2}$ -0.42 $\frac{1}{2}$	0.37 $\frac{1}{2}$ -0.38 $\frac{1}{2}$	0.34 $\frac{1}{2}$ -0.36 $\frac{1}{2}$	2.01 $\frac{1}{2}$ -2.12 $\frac{1}{2}$	1.96 $\frac{1}{2}$ -2.07 $\frac{1}{2}$	1.81 $\frac{1}{2}$ -1.90 $\frac{1}{2}$	
1923.	0.56 $\frac{1}{2}$ -0.58 $\frac{1}{2}$	0.43 $\frac{1}{2}$ -0.45 $\frac{1}{2}$	0.41 $\frac{1}{2}$ -0.44	0.40 $\frac{1}{2}$ -0.42 $\frac{1}{2}$	0.39 $\frac{1}{2}$ -0.41 $\frac{1}{2}$	2.06 $\frac{1}{2}$ -2.15 $\frac{1}{2}$	1.98 -2.06 $\frac{1}{2}$	1.69 $\frac{1}{2}$ -1.79 $\frac{1}{2}$	
Sept.—									
1914.	0.55 $\frac{1}{2}$ -0.65 $\frac{1}{2}$	0.49 $\frac{1}{2}$ -0.52 $\frac{1}{2}$	0.48 $\frac{1}{2}$ -0.51 $\frac{1}{2}$	0.48 $\frac{1}{2}$ -0.51 $\frac{1}{2}$	0.46 $\frac{1}{2}$ -0.50	1.28 $\frac{1}{2}$ -1.31 $\frac{1}{2}$	1.25 $\frac{1}{2}$ -1.28 $\frac{1}{2}$	-	
1921.	0.70 $\frac{1}{2}$ 0.74	0.46 $\frac{1}{2}$ -0.48 $\frac{1}{2}$	0.44 -0.46	0.42 $\frac{1}{2}$ -0.44 $\frac{1}{2}$	0.40 $\frac{1}{2}$ -0.43	1.96 $\frac{1}{2}$ -2.04 $\frac{1}{2}$	1.92 $\frac{1}{2}$ -2.00 $\frac{1}{2}$	1.67 $\frac{1}{2}$ -1.76 $\frac{1}{2}$	
1922.	0.53 $\frac{1}{2}$ 0.56	0.44 $\frac{1}{2}$ -0.46 $\frac{1}{2}$	0.41 $\frac{1}{2}$ -0.43	0.37 $\frac{1}{2}$ -0.39 $\frac{1}{2}$	0.35 $\frac{1}{2}$ -0.37	1.97 -2.04 $\frac{1}{2}$	1.93 -1.99 $\frac{1}{2}$	1.79 $\frac{1}{2}$ -1.86 $\frac{1}{2}$	
1923.	0.52 $\frac{1}{2}$ -	0.44 $\frac{1}{2}$ -	0.42 $\frac{1}{2}$ -	0.41 $\frac{1}{2}$ -	0.40 $\frac{1}{2}$ -	2.09 $\frac{1}{2}$ -	2.00 -	1.69 $\frac{1}{2}$ -	
Oct.—									
1914.	0.57 $\frac{1}{2}$ -0.67 $\frac{1}{2}$	0.51 $\frac{1}{2}$ -0.53 $\frac{1}{2}$	0.48 $\frac{1}{2}$ -0.50	0.48 -0.49 $\frac{1}{2}$	0.47 -0.48	1.10 $\frac{1}{2}$ -1.14 $\frac{1}{2}$	1.09 $\frac{1}{2}$ -1.13	-	
1921.	0.56 -0.59 $\frac{1}{2}$	0.41 $\frac{1}{2}$ -0.43 $\frac{1}{2}$	0.38 $\frac{1}{2}$ -0.40 $\frac{1}{2}$	0.36 $\frac{1}{2}$ -0.39	0.34 $\frac{1}{2}$ -0.36 $\frac{1}{2}$	1.78 $\frac{1}{2}$ -1.87	1.71 $\frac{1}{2}$ -1.83	1.48 $\frac{1}{2}$ -1.57 $\frac{1}{2}$	
1922.	0.51 $\frac{1}{2}$ -0.53 $\frac{1}{2}$	0.41 $\frac{1}{2}$ -0.45 $\frac{1}{2}$	0.39 -0.41 $\frac{1}{2}$	0.37 -0.39 $\frac{1}{2}$	0.33 $\frac{1}{2}$ -0.36 $\frac{1}{2}$	2.06 -2.15 $\frac{1}{2}$	2.01 $\frac{1}{2}$ -2.11	1.80 -1.91 $\frac{1}{2}$	
1923.	0.51 $\frac{1}{2}$ -	0.42 $\frac{1}{2}$ -	0.39 $\frac{1}{2}$ -	0.37 $\frac{1}{2}$ -	0.35 -	2.11 $\frac{1}{2}$ -	2.06 $\frac{1}{2}$ -	1.77 $\frac{1}{2}$ -	
Nov.—									
1914.	0.60 $\frac{1}{2}$ -0.67 $\frac{1}{2}$	0.54 $\frac{1}{2}$ -0.55 $\frac{1}{2}$	0.52 -0.53 $\frac{1}{2}$	0.51 -0.52 $\frac{1}{2}$	0.50 -0.52	1.20 $\frac{1}{2}$ -1.28 $\frac{1}{2}$	1.17 $\frac{1}{2}$ -1.24 $\frac{1}{2}$	-	
1921.	0.55 $\frac{1}{2}$ 0.58 $\frac{1}{2}$	0.42 $\frac{1}{2}$ -0.44 $\frac{1}{2}$	0.39 $\frac{1}{2}$ -0.41 $\frac{1}{2}$	0.37 $\frac{1}{2}$ -0.39 $\frac{1}{2}$	0.34 $\frac{1}{2}$ -0.37 $\frac{1}{2}$	1.71 $\frac{1}{2}$ -1.76 $\frac{1}{2}$	1.67 $\frac{1}{2}$ -1.72 $\frac{1}{2}$	1.41 $\frac{1}{2}$ -1.46 $\frac{1}{2}$	
1922.	0.52 $\frac{1}{2}$ -0.54 $\frac{1}{2}$	0.46 $\frac{1}{2}$ -0.49	0.40 $\frac{1}{2}$ -0.43	0.38 $\frac{1}{2}$ -0.39 $\frac{1}{2}$	0.35 $\frac{1}{2}$ -0.37 $\frac{1}{2}$	2.05 $\frac{1}{2}$ -2.21	2.01 $\frac{1}{2}$ -2.16	1.65 $\frac{1}{2}$ -1.73 $\frac{1}{2}$	
1923.	0.53 $\frac{1}{2}$ -	0.39 $\frac{1}{2}$ -	0.36 $\frac{1}{2}$ -	0.35 -	0.33 $\frac{1}{2}$ -	2.07 $\frac{1}{2}$ -	2.03 $\frac{1}{2}$ -	1.78 $\frac{1}{2}$ -	
Dec.—									
1914.	0.55 $\frac{1}{2}$ -0.64	0.52 $\frac{1}{2}$ -0.53 $\frac{1}{2}$	0.49 $\frac{1}{2}$ -0.50 $\frac{1}{2}$	0.48 $\frac{1}{2}$ -0.49 $\frac{1}{2}$	0.48 $\frac{1}{2}$ -0.48 $\frac{1}{2}$	1.27 $\frac{1}{2}$ -1.31 $\frac{1}{2}$	1.24 $\frac{1}{2}$ -1.28 $\frac{1}{2}$	-	
1921.	0.54 $\frac{1}{2}$ 0.56 $\frac{1}{2}$	0.42 $\frac{1}{2}$ -0.44 $\frac{1}{2}$	0.39 $\frac{1}{2}$ -0.41 $\frac{1}{2}$	0.37 $\frac{1}{2}$ -0.39 $\frac{1}{2}$	0.34 $\frac{1}{2}$ -0.37 $\frac{1}{2}$	1.70 -1.75 $\frac{1}{2}$	1.66 -1.71 $\frac{1}{2}$	1.40 -1.45 $\frac{1}{2}$	
1922.	0.54 $\frac{1}{2}$ -0.55 $\frac{1}{2}$	0.46 $\frac{1}{2}$ -0.47 $\frac{1}{2}$	0.41 $\frac{1}{2}$ -0.43 $\frac{1}{2}$	0.39 -0.41	0.36 $\frac{1}{2}$ -0.38 $\frac{1}{2}$	2.03 $\frac{1}{2}$ -2.10	1.97 $\frac{1}{2}$ -2.05 $\frac{1}{2}$	1.63 $\frac{1}{2}$ -1.73 $\frac{1}{2}$	
1923.	0.56 -	0.36 $\frac{1}{2}$ -	0.33 $\frac{1}{2}$ -	0.31 $\frac{1}{2}$ -	0.29 $\frac{1}{2}$ -	1.99 $\frac{1}{2}$ -	1.95 $\frac{1}{2}$ -	1.71 $\frac{1}{2}$ -	

43.—Monthly Range of Average Prices in British Markets of Canadian Wheat and Oats, 1913 and 1921-23.

Date.	WHEAT (per bushel of 60 lb.)				OATS (per bushel of 34 lb.)
	No. 1.	No. 2.	No. 3.	No. 4.	
Average for—	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.
January 1913.....	1.12 -1.15	1.09 -1.12	1.06 -1.07	1.04 -1.05	0.54 -0.57
" 1921.....	3.05 $\frac{1}{2}$ -3.11 $\frac{1}{2}$	3.00 $\frac{1}{2}$ -3.03	2.86 $\frac{1}{2}$ -2.90 $\frac{1}{2}$	2.95 $\frac{1}{2}$ -3.06	1.13-1.17 $\frac{1}{2}$
" 1922.....	1.60 $\frac{1}{2}$ -1.69 $\frac{1}{2}$	1.62 -1.65	1.56 -1.59	1.53 $\frac{1}{2}$ -1.56	0.80 $\frac{1}{2}$ -0.82 $\frac{1}{2}$
" 1923.....	1.56 $\frac{1}{2}$ -1.61	1.53 $\frac{1}{2}$ -1.56 $\frac{1}{2}$	1.45 $\frac{1}{2}$ -1.48 $\frac{1}{2}$	1.37 $\frac{1}{2}$ -1.42	0.77 $\frac{1}{2}$ -0.79 $\frac{1}{2}$
February 1913.....	1.15 -1.17	1.13 -1.15	1.09 -1.10	1.06 -1.08	0.54 -0.57
" 1921.....	2.81 $\frac{1}{2}$ -2.84	2.75 $\frac{1}{2}$ -2.78 $\frac{1}{2}$	2.67 $\frac{1}{2}$ -2.70 $\frac{1}{2}$	2.60 $\frac{1}{2}$ -2.63 $\frac{1}{2}$	1.02 $\frac{1}{2}$ -1.10 $\frac{1}{2}$
" 1922.....	1.81 -1.83 $\frac{1}{2}$	1.75 -1.78 $\frac{1}{2}$	1.65 -1.72	1.66 $\frac{1}{2}$ -1.65	0.97 -0.99 $\frac{1}{2}$
" 1923.....	1.51 $\frac{1}{2}$ -1.55 $\frac{1}{2}$	1.48 $\frac{1}{2}$ -1.51 $\frac{1}{2}$	1.38 $\frac{1}{2}$ -1.41 $\frac{1}{2}$	1.25 $\frac{1}{2}$ -1.32	0.81 $\frac{1}{2}$ -0.83 $\frac{1}{2}$
March 1913.....	1.15 -1.17	1.12 -1.13	1.09 -1.10	-	0.53 -0.55
" 1921.....	2.79 $\frac{1}{2}$ -2.82 $\frac{1}{2}$	2.75 $\frac{1}{2}$ -2.78 $\frac{1}{2}$	2.67 $\frac{1}{2}$ -2.70 $\frac{1}{2}$	2.62 -2.65	-
" 1922.....	1.97 $\frac{1}{2}$ -2.02 $\frac{1}{2}$	1.90 -1.95	1.84 $\frac{1}{2}$ -1.87 $\frac{1}{2}$	1.78 $\frac{1}{2}$ -1.81 $\frac{1}{2}$	0.92 $\frac{1}{2}$ -0.96 $\frac{1}{2}$
" 1923.....	1.46 $\frac{1}{2}$ -1.53 $\frac{1}{2}$	1.43 $\frac{1}{2}$ -1.46 $\frac{1}{2}$	1.33 $\frac{1}{2}$ -1.36 $\frac{1}{2}$	1.22 $\frac{1}{2}$ -1.28 $\frac{1}{2}$	0.79 $\frac{1}{2}$ -0.81 $\frac{1}{2}$
April 1913.....	1.15 -1.16	1.12 -1.13	1.21 -1.22	1.19 -1.20	0.52 -0.54
" 1921.....	2.71 $\frac{1}{2}$ -2.74 $\frac{1}{2}$	2.68 $\frac{1}{2}$ -2.71 $\frac{1}{2}$	2.61 $\frac{1}{2}$ -2.64 $\frac{1}{2}$	2.56 -2.59	-
" 1922.....	1.86 $\frac{1}{2}$ -1.89 $\frac{1}{2}$	1.84 -1.85 $\frac{1}{2}$	1.78 -1.81	1.72 -1.75	0.76 $\frac{1}{2}$ -0.78 $\frac{1}{2}$
" 1923.....	1.51 $\frac{1}{2}$ -1.57 $\frac{1}{2}$	1.47 $\frac{1}{2}$ -1.50 $\frac{1}{2}$	1.37 $\frac{1}{2}$ -1.41	1.20 $\frac{1}{2}$ -1.27 $\frac{1}{2}$	0.77 $\frac{1}{2}$ -0.79 $\frac{1}{2}$

43.—Monthly Range of Average Prices in British Markets of Canadian Wheat and Oats, 1913 and 1921-1923—concluded.

Date.		WHEAT (per bushel of 60 lb.)								OATS (per bushel of 34 lb.)	
		No. 1.		No. 2.		No. 3.		No. 4.		OATS (per bushel of 34 lb.)	
		\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.		
May	1913.....	1.20	-1.21	1.18	-1.19	1.14	-1.15	1.11	-1.12	0.52	-0.55
"	1921.....	2.75	-2.77½	2.72	-2.75	2.66	-2.69	2.61½	-2.65	-	-
"	1922.....	1.87½	-1.93	1.84½	-1.87½	1.73	-1.76½	1.67	-1.70	0.79	-0.81½
"	1923.....	1.59½	-1.63	1.53½	-1.56½	1.43½	-1.46½	-	-	0.74½	-0.76½
June	1913.....	1.16	-1.18	1.13	-1.15	1.10	-1.12	1.05	-1.07	0.52	-0.57
"	1921.....	2.69½	-2.72½	2.66½	-2.69	2.62	-2.64½	2.50½	-2.53½	-	-
"	1922.....	1.76½	-1.78½	1.73	-1.75½	1.62½	-1.65½	1.59½	-1.62½	0.80½	-0.82½
"	1923.....	1.59	-1.62½	1.52½	-1.55½	1.42½	-1.46	-	-	0.73½	-0.76½
July	1913.....	1.16	-1.18	1.13	-1.14	1.09	-1.10	1.02	-1.04	0.52	-0.56
"	1921.....	2.61½	-2.64½	2.58½	-2.60½	2.53½	-2.55½	2.39	-2.41½	0.80½	-0.86
"	1922.....	1.80½	-1.83½	1.75½	-1.78½	1.62½	-1.66½	1.58	-1.60½	0.80½	-0.82½
"	1923.....	1.54½	-1.57½	1.48	-1.51½	1.38½	-1.41½	-	-	0.71½	-0.73½
August	1913.....	1.12	-1.14	1.10	-1.11	1.05	-1.07	0.99	-1.00	0.52	-0.54
"	1921.....	2.70½	-2.73½	2.67½	-2.70½	2.60½	-2.63½	2.57½	-2.60½	0.92½	-0.98½
"	1922.....	1.76½	-1.79½	1.70½	-1.73½	1.64½	-1.67½	1.61½	-1.64	0.75½	-0.78½
"	1923.....	1.42½	-1.45½	1.37½	-1.41	1.29½	-1.32½	-	-	0.72	-0.73½
September	1913.....	1.13	-1.14	1.10	-1.11	1.06	-1.07	1.02	-1.03	0.50	-0.53
"	1921.....	2.77½	-2.80½	-	-	-	-	-	-	0.97½	-1.00½
"	1922.....	1.49½	-1.53½	1.47	-1.50½	1.42	-1.44½	1.39	-1.41½	0.75	-0.77½
"	1923.....	1.38½	-1.41½	1.33½	-1.37	1.27	-1.30½	-	-	0.72	-0.73½
October	1913.....	1.07	-1.09	1.04	-1.06	1.02	-1.04	0.97	-1.00	0.48	-0.51
"	1921.....	2.00½	-2.06½	1.91½	-1.96½	1.75½	-1.77½	1.70	-1.73	0.78½	-0.81
"	1922.....	1.59½	-1.62½	1.56½	-1.59½	1.50½	-1.53½	1.47½	-1.50½	0.77½	-0.80
"	1923.....	1.37½	-1.40½	1.31	-1.34½	1.24½	-1.27½	1.21½	-1.24½	0.72½	-0.74½
November	1913.....	1.04	-1.06	1.01	-1.04	0.98	-1.01	0.95	-0.98	0.48	-0.51
"	1921.....	1.61	-1.64½	1.58½	-1.61	1.51½	-1.54½	1.48½	-1.51½	0.92	-0.94½
"	1922.....	1.62½	-1.65½	1.59½	-1.62½	1.53½	-1.56½	1.50½	-1.53½	0.80½	-0.82½
"	1923.....	1.41	-1.44½	1.34½	-1.37½	1.28	-1.31	-	-	0.75½	-0.77½
December	1913.....	1.06	-1.08	1.02	-1.04	0.99	-1.02	0.96	-0.99	0.49	-0.52
"	1921.....	1.65½	-1.68½	1.62½	-1.65½	1.56½	-1.57½	1.53½	-1.56½	0.90½	-0.93½
"	1922.....	1.57½	-1.60½	1.54½	-1.57½	1.48½	-1.51½	1.45½	-1.48½	0.78½	-0.80½
"	1923.....	1.23½	-1.46½	1.36½	-1.40½	1.30½	-1.33½	-	-	0.76½	-0.78

44.—Yearly Average Prices of Home-Grown Wheat, Barley and Oats in England and Wales, 1902-1923.

SOURCE: "London Gazette," published pursuant to Sec. 8 of the Corn Returns Act, 1882, and the Corn Sales Act, 1921.

Years.	Wheat.		Barley.		Oats.		Years.	Wheat.		Barley.		Oats.	
	per qr.	per bush.	per qr.	per bush.	per qr.	per bush.		per qr.	per bush.	per qr.	per bush.	per qr.	per bush.
1902	s. d.	\$ c.	s. d.	\$ c.	s. d.	\$ c.	1915	s. d.	\$ c.	s. d.	\$ c.	s. d.	\$ c.
1903	28 1	0.85	25 8	0.78	20 2	0.61	1916	52 10	1.61	37 4	1.13	30 2	0.92
1904	26 9	0.81	22 8	0.69	17 2	0.52	1917	58 5	1.78	53 6	1.56	33 5	0.89
1905	28 4	0.86	22 4	0.68	16 4	0.50	1918	75 9	2.30	64 9	1.89	49 10	1.32
1906	29 8	0.90	24 4	0.74	17 4	0.53	1919	72 10	2.22	59 0	1.72	49 4	1.31
1907	28 3	0.86	24 2	0.73	18 4	0.56	1920	72 11	2.22	75 9	2.21	52 5	1.39
1908	30 7	0.93	25 1	0.76	18 10	0.57	1921	80 10	2.46	89 5	2.60	56 10	1.51
1909	32 0	0.97	25 10	0.79	17 10	0.54	1922	71 6	2.17	52 2	1.52	34 2	0.90
1910	36 11	0.82	26 10	0.82	18 11	0.58	1923	47 11	1.46	40 3	1.13	29 1	0.77
1911	31 8	0.96	23 1	0.70	17 4	0.53		per long	per	per long	per	per long	per
1912	31 8	0.96	27 3	0.83	18 10	0.57		cwt.	bush.	cwt.	bush.	cwt.	bush.
1913	34 9	1.06	30 8	0.93	21 6	0.65		9 10	1.28	9 5	0.98	9 7	0.71
1914	31 8	0.96	27 3	0.83	19 1	0.58							
1915	34 11	1.06	27 2	0.83	20 11	0.64							

NOTE.—By the Corn Sales Act, 1921, the legal unit was changed from qrs. to cwt., the change becoming compulsory on January 1, 1923.

45.—Average Monthly Prices of Flour, Bran and Shorts, at Principal Markets, 1923.

SOURCE: For Montreal, "Trade Bulletin"; for Toronto, dealers' quotations; for Winnipeg and U.S. Cities, "The Northwestern Miller," Minneapolis.

Months.	Montreal.				Toronto.			
	Flour, Manitoba Standard grade.	Flour, Ontario, del'd at Montreal.	Bran.	Shorts.	First Pat-ents Flour (Jute bags).	First Pat-ents Flour (Cotton bags).	Bran.	Shorts.
1923.	Per brl. \$ cts.	Per brl. \$ cts.	Per ton. \$ cts.	Per ton. \$ cts.	Per brl. \$ cts.	Per brl. \$ cts.	Per ton. \$ cts.	Per ton. \$ cts.
January.....	7.10	5.70	24.25	26.25	7.10	7.20	24.25	26.25
February.....	7.10	5.70	27.75	29.25	7.10	7.25	26.25	28.25
March.....	7.10	5.64	31.70	33.60	7.10	7.25	28.25	30.25
April.....	7.20 ²	5.48	31.13	32.33	7.30	7.45	28.25	30.25
May.....	7.28 ²	5.65	30.50	31.50	7.30	7.45	28.25	30.25
June.....	6.90 ²	5.65	26.20	29.00	6.90	7.05	26.25	29.25
July.....	6.90 ²	5.40	25.63	28.63	6.90	7.05	26.25	28.25
August.....	6.90 ²	4.86	26.05	29.05	6.90	7.05	28.25	31.25
September.....	6.82 ²	5.30 ¹	29.83	32.58	6.90	7.05	28.25	31.25
October.....	6.43 ²	5.05 ¹	28.00	31.00	6.50	6.65	28.25	31.25
November.....	6.30 ²	5.05 ¹	27.25	30.25	6.30	6.45	27.25	30.25
December.....	6.16 ²	4.93 ¹	27.38	30.25	6.10	6.25	27.25	30.25

Months.	Winnipeg.			Minneapolis.						Duluth.	
	Flour.	Bran.	Shorts.	Flour.	Bran.	Shorts.	Flour.	Bran.	Shorts.	Flour.	Shorts.
1923.	Per brl. \$ cts.	Per ton. \$ cts.	Per ton. \$ cts.	Per brl. \$ cts.	Per ton. \$ cts.	Per ton. \$ cts.	Per brl. \$ cts.	Per ton. \$ cts.	Per ton. \$ cts.	Per brl. \$ cts.	Per ton. \$ cts.
January.....	6.50	18.25—18.50	22.00	6.87 — 7.42	24.60 — 24.70	24.70 — 24.70	7.15 — 7.35				
February.....	6.50	20.00	24.00	6.75 — 7.41	27.50 — 28.00	27.50 — 28.00	6.83 — 7.13				
March.....	6.50	20.25	22.25	6.61 — 7.33	28.50 — 29.00	28.50 — 29.00	6.88 — 7.18				
April.....	6.65	22.00	24.00	6.91 — 7.73	27.38 — 27.75	27.50 — 28.00	7.10 — 7.40				
May.....	6.70	22.00	24.00	6.72 — 7.36	27.20 — 27.80	28.50 — 28.80	6.82 — 7.03				
June.....	6.65	22.00	24.00	6.32 — 6.87	21.00 — 21.62	25.00 — 25.75	6.26 — 6.51				
July.....	6.60	22.00	24.00	5.96 — 6.59	19.94 — 20.25	24.81 — 25.25	5.81 — 5.99				
August.....	6.58	22.40	24.40	6.13 — 6.70	23.80 — 24.10	26.20 — 26.50	6.19 — 6.34				
September.....	6.55	23.00	25.00	6.34 — 6.76	27.40 — 27.85	28.30 — 28.85	6.45 — 6.60				
October.....	6.20	21.00	23.00	6.26 — 6.76	28.13 — 28.63	28.25 — 29.00	6.30 — 6.51				
November.....	6.20	21.00	23.00	6.11 — 6.62	27.20 — 27.60	27.20 — 27.40	6.00 — 6.25				
December.....	6.00	21.00	23.00	6.09 — 6.66	25.88 — 26.88	25.38 — 26.00	5.98 — 6.23				

NOTE.—The ton=2,000 lb. and the barrel=196 lb. ¹Winter Wheat, ex. track, "Trade Bulletin."
²Spring wheat flour, 1st patents, "Montreal Gazette."

46.—Average Prices per cwt. of Canadian Live Stock at Principal Markets, 1921-1923

SOURCE: Markets Intelligence Division, Live Stock Branch, Dominion Department of Agriculture

Classification.	Toronto.			Montreal.		
	1921.	1922.	1923.	1921.	1922.	1923.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Steers—heavy finished.....	7 73	7 48	7 33	8 92	8 75	7 48
Steers—1,000-1,200 lb., good.....	7 53	7 36	6 95	8 24	6 81	6 60
Steers—1,000-1,200 lb., common.....	6 64	5 70	5 72	5 97	5 03	5 41
Steers—700-1,000 lb., good.....	7 24	6 98	6 80	7 55	7 03	6 33
Steers—700-1,000 lb., common.....	5 24	5 31	5 26	5 85	5 21	4 80
Heifers, good.....	7 66	7 07	6 74	7 19	6 49	6 68
Heifers, fair.....	6 13	5 90	5 79	5 91	5 04	4 77
Heifers, common.....	4 35	4 41	4 38	3 80	4 03	3 52
Cows, good.....	5 86	5 20	4 86	5 88	4 98	4 80
Cows, common.....	4 52	3 69	3 60	4 65	3 85	3 42
Bulls, good.....	5 55	4 78	4 58	6 98	5 74	4 62
Bulls, common.....	3 71	3 02	3 03	3 43	3 33	2 90
Canners and cutters.....	2 49	2 03	1 71	2 28	2 16	1 99
Oxen.....	—	3 50	—	6 27	6 44	4 75
Calves, veal.....	10 24	8 75	8 85	6 94	6 45	6 13
Calves, grass.....	3 04	3 71	3 33	2 92	3 46	3 20
Stockers—450-800 lb., good.....	4 87	5 01	4 43	—	—	—
Stockers—450-800 lb., fair.....	3 15	3 71	3 68	—	—	—
Feeders—800-1,000 lb., good.....	7 01	5 89	6 34	—	—	—
Feeders—800-1,000 lb., fair.....	3 90	4 69	4 78	—	—	—
Hogs (fed and watered), selects.....	11 72	12 63	9 76 ¹	12 52	13 19	9 95 ¹
Hogs (fed and watered), heavies.....	10 01	10 46	8 99	10 11	12 29	9 63
Hogs (fed and watered), lights.....	9 56	11 49	9 20 ²	12 13	11 94	9 95 ²
Hogs (fed and watered), sows.....	8 17	9 06	6 76 ³	8 31	10 01	8 00 ³
Hogs (fed and watered), stags.....	9 25	4 91	4 25	9 92	7 19	5 39
Lambs, good.....	9 59	11 93	12 28	8 23	10 64	11 00
Lambs, common.....	7 43	8 88	9 27	6 49	8 59	9 35
Sheep, heavy.....	4 64	4 17	4 80	—	6 50	4 15
Sheep, light.....	5 25	6 30	6 60	4 56	5 35	5 46
Sheep, common.....	2 91	2 71	2 87	3 37	3 80	4 20

Classification.	Winnipeg.			Edmonton.		
	1921.	1922.	1923.	1921.	1922.	1923.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Steers—heavy finished.....	5 41	4 98	5 12	5 27	5 04	4 90
Steers—1,000-1,200 lb., good.....	5 78	5 46	5 57	5 49	4 89	4 73
Steers—1,000-1,200 lb., common.....	3 89	5 60	3 79	3 85	2 82	2 85
Steers—700-1,000 lb., good.....	5 67	5 60	5 58	4 77	4 50	4 91
Steers—700-1,000 lb., common.....	4 12	3 75	3 67	3 68	2 60	2 93
Heifers, good.....	5 19	4 85	4 88	3 58	3 73	3 82
Heifers, fair.....	4 04	3 78	3 75	3 47	2 70	2 80
Heifers, common.....	2 92	2 76	2 62	2 82	2 01	2 24
Cows, good.....	4 34	3 72	3 59	4 05	3 12	3 11
Cows, common.....	3 18	2 62	2 67	2 96	2 01	1 91
Bulls, good.....	3 32	2 64	2 28	2 88	2 11	2 15
Bulls, common.....	2 55	1 96	1 74	2 19	1 34	1 27
Canners and cutters.....	2 06	1 63	1 51	2 04	1 08	1 29
Oxen.....	2 87	2 71	2 30	3 00	2 93	2 06
Calves, veal.....	5 47	5 05	4 86	5 31	3 71	4 19
Calves, grass.....	—	—	—	—	—	—
Stockers—450-800 lb., good.....	3 52	3 47	3 46	3 46	3 17	3 23
Stockers—450-800 lb., fair.....	2 81	2 61	2 54	2 87	2 28	2 40
Feeders—800-1,000 lb., good.....	4 27	4 12	4 29	3 34	3 37	3 80
Feeders—800-1,000 lb., fair.....	3 61	3 24	3 36	3 06	2 70	2 95
Hogs (fed and watered), selects.....	12 01	10 93	8 64 ¹	10 70	10 02	8 70 ¹
Hogs (fed and watered), heavies.....	9 56	8 82	7 79	9 98	9 49	6 78
Hogs (fed and watered), lights.....	11 00	10 24	8 00 ²	7 44	7 69	8 07 ²
Hogs (fed and watered), stags.....	6 07	4 76	3 65	6 06	3 22	3 00
Hogs (fed and watered), sows.....	6 77	7 13	6 68 ³	8 22	7 14	6 98 ³
Lambs, good.....	8 88	10 15	10 49	7 58	9 55	10 22
Lambs, common.....	6 26	6 62	7 11	5 66	6 52	7 97
Sheep, heavy.....	—	—	—	—	5 00	—
Sheep, light.....	5 21	5 99	6 51	5 26	6 36	6 62
Sheep, common.....	2 98	3 22	3 52	3 54	3 69	3 50

¹Thick, Smooth, Select Bacon: Toronto, \$10.53: Montreal, \$10.69: Winnipeg and Edmonton, \$9.57.²Shop Hogs, Lights and Feeders: Toronto, \$8.84: Montreal, \$10.30: Winnipeg, \$8.51: Edmonton, \$8.17.³Sows No. 1, Sows No. 2: Toronto, \$5.94: Montreal, \$7.46: Winnipeg, \$5.60: Edmonton, \$5.79.

47.—Average Monthly Prices per cwt. of Canadian Live Stock at Principal Markets, 1923.

SOURCE:—Markets Intelligence Division, Live Stock Branch, Dominion Department of Agriculture.

Classification.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Montreal—												
Steers, 1,000-1,200 lb., good.....	6 35	6 49	6 76	7 26	7 66	8 00	7 69	6 66	6 40	5 77	5 42	5 50
Heifers, good.....	5 75	5 86	6 69	6 99	7 53	—	—	—	—	—	—	5 25
Calves, veal.....	9 86	9 76	6 07	5 06	5 36	6 17	6 25	7 18	8 21	9 87	10 00	10 00
Hogs (fed and watered), selects.....	11 02	10 92	10 10	11 64	11 75	10 25	9 52	10 46	10 11	9 10	8 71	8 55
Hogs (fed and watered), lights.....	11 13	10 84	10 51	11 88	11 75	10 34	9 78	10 49	10 08	9 13	8 60	8 53
Lambs, good.....	10 95	10 75	10 88	11 15	17 15	14 13	11 86	11 15	10 68	10 70	10 52	10 85
Sheep, light.....	5 23	5 67	6 44	7 90	6 92	5 66	4 25	5 06	4 81	5 00	5 00	5 54
Toronto—												
Steers, 1,000-1,200 lb., good.....	6 49	6 54	6 66	6 96	7 49	7 70	7 54	6 82	6 86	6 16	5 74	6 40
Heifers, good.....	6 30	6 33	6 26	6 79	7 31	7 63	7 26	6 94	6 67	6 34	5 81	6 24
Calves, veal.....	10 72	11 56	9 35	6 95	7 85	7 92	8 35	10 04	10 11	9 88	9 48	9 77
Hogs (fed and watered), selects.....	10 55	10 76	10 10	11 13	11 10	8 77	8 65	10 23	9 94	8 78	8 33	8 26
Hogs (fed and watered), lights.....	10 05	10 21	9 65	10 62	10 61	8 27	8 04	9 72	9 47	8 15	7 65	7 47
Lambs, good.....	13 17	13 44	14 59	14 95	16 44	16 38	14 13	11 75	12 21	11 30	10 97	11 16
Sheep, light.....	7 32	8 57	8 70	8 10	7 43	5 33	6 00	5 66	6 49	6 25	5 80	5 96
Winnipeg—												
Steers, 1,000-1,200 lb., good.....	5 07	5 28	5 56	6 13	6 60	6 83	6 44	5 43	5 29	4 68	4 51	4 71
Heifers, good.....	6 45	4 80	4 98	5 71	6 27	6 60	6 38	5 22	4 70	4 17	4 14	4 33
Calves, veal.....	5 29	5 35	6 99	6 70	6 56	5 26	4 70	5 42	4 63	4 26	3 55	3 51
Hogs (fed and watered), selects.....	9 21	9 15	8 76	9 75	9 53	8 26	8 51	9 64	10 32	8 45	7 59	7 18
Hogs (fed and watered), lights.....	8 93	9 00	8 29	9 28	9 20	8 32	8 57	9 16	9 59	7 70	7 02	6 73
Lambs, good.....	11 17	11 66	11 72	11 94	12 86	12 18	10 76	9 93	9 77	9 88	10 37	10 58
Sheep, light.....	6 44	7 17	7 22	7 47	7 79	6 75	6 01	6 41	6 40	6 22	6 15	6 19
Calgary—												
Steers, 1,000-1,200 lb., good.....	4 71	4 88	5 44	5 60	6 00	6 15	5 24	4 84	4 85	4 67	4 17	4 19
Heifers, good.....	3 70	3 87	4 17	4 31	5 00	5 25	4 50	3 74	3 65	3 61	3 55	3 38
Calves, veal.....	3 36	4 00	4 13	5 46	6 44	6 50	5 90	5 33	5 50	4 33	3 91	3 37
Hogs (fed and watered), selects.....	8 47	8 38	8 24	9 00	8 71	7 77	7 83	9 37	10 18	8 93	7 49	6 37
Hogs (fed and watered), lights.....	7 37	7 39	7 18	7 95	7 74	6 79	6 79	8 83	—	7 35	7 03	—
Lambs, good.....	10 44	11 13	11 11	11 50	12 17	11 75	11 78	11 79	10 69	10 97	10 58	11 21
Sheep, light.....	6 82	7 25	7 26	7 35	8 59	—	7 83	7 90	8 31	8 00	8 23	8 40
Edmonton—												
Steers, 1,000-1,200 lb., good.....	4 96	4 75	5 03	5 75	6 38	6 53	5 15	4 29	4 00	3 70	3 85	3 84
Heifers, good.....	4 33	3 96	4 34	5 33	5 94	5 60	3 99	3 60	3 50	3 22	3 30	3 27
Calves, veal.....	4 13	4 50	5 60	5 50	6 44	4 75	4 50	4 50	4 50	4 15	3 75	3 18
Hogs (fed and watered), selects.....	9 13	9 00	8 62	9 72	9 45	8 24	8 33	9 69	10 54	8 96	7 82	6 87
Hogs (fed and watered), lights.....	8 15	8 00	7 65	8 75	8 37	7 23	7 44	9 09	9 94	8 21	7 35	6 30
Lambs, good.....	9 60	10 00	10 21	10 25	10 50	11 38	11 67	9 50	9 94	10 16	10 66	10 50
Sheep, light.....	5 50	5 50	6 00	6 40	—	7 50	7 00	6 50	6 50	6 50	6 75	7 00

Clover and Grass Seed Prices.—A survey of clover and grass seed prices has been undertaken annually in recent years by the Dominion Bureau of Statistics, in co-operation with the Seed Branch of the Dominion Department of Agriculture. Tables 48 and 49 give the average prices per lb. paid to and paid by farmers in Canada for each of the years 1919 to 1924, with averages by provinces for 1924.

48.—Average Prices per lb. paid by Farmers to Seed Dealers for No. 1 Grade of Clover and Grass Seed by Provinces, April, 1924 and Average Prices for Canada, April and May, 1919-24.

Provinces.	Red Clover.	Alsike.	Alfalfa.	Sweet Clover.	Timothy.	Blue Grass.	Western Rye.	Brome Grass.
	cents.	cents.	cents.	cents.	cents.	cents.	cents.	cents.
Prince Edward Island.....	26	16	25	13	13	—	—	—
Nova Scotia.....	27	15½	24	13	13	—	—	—
New Brunswick....	27	16	23½	14	14	—	—	—
Quebec.....	26	15	23½	13	13	Recleaned quality.		
Ontario.....	25	14	23	12	14	35	—	—
Manitoba.....	28	15	25	13	15	37	12½	13
Saskatchewan.....	30	16	28	14	14	44	13	13½
Alberta.....	30	16	28	15	15	46	14	15
British Columbia..	32	18	30	17	16	47½	14½	16
Canada.....1924	27	16	25	13½	15	42	13	14½
1923	29	21	34	13	13½	—	13	14
1922	32½	26½	38½	15½	14	—	17½	19½
1921	40½	41½	51½	20½	16½	—	21½	20
1920	74½	69	65	45	23½	—	38	43
1919	53½	44	43½	40	18½	—	32	37½

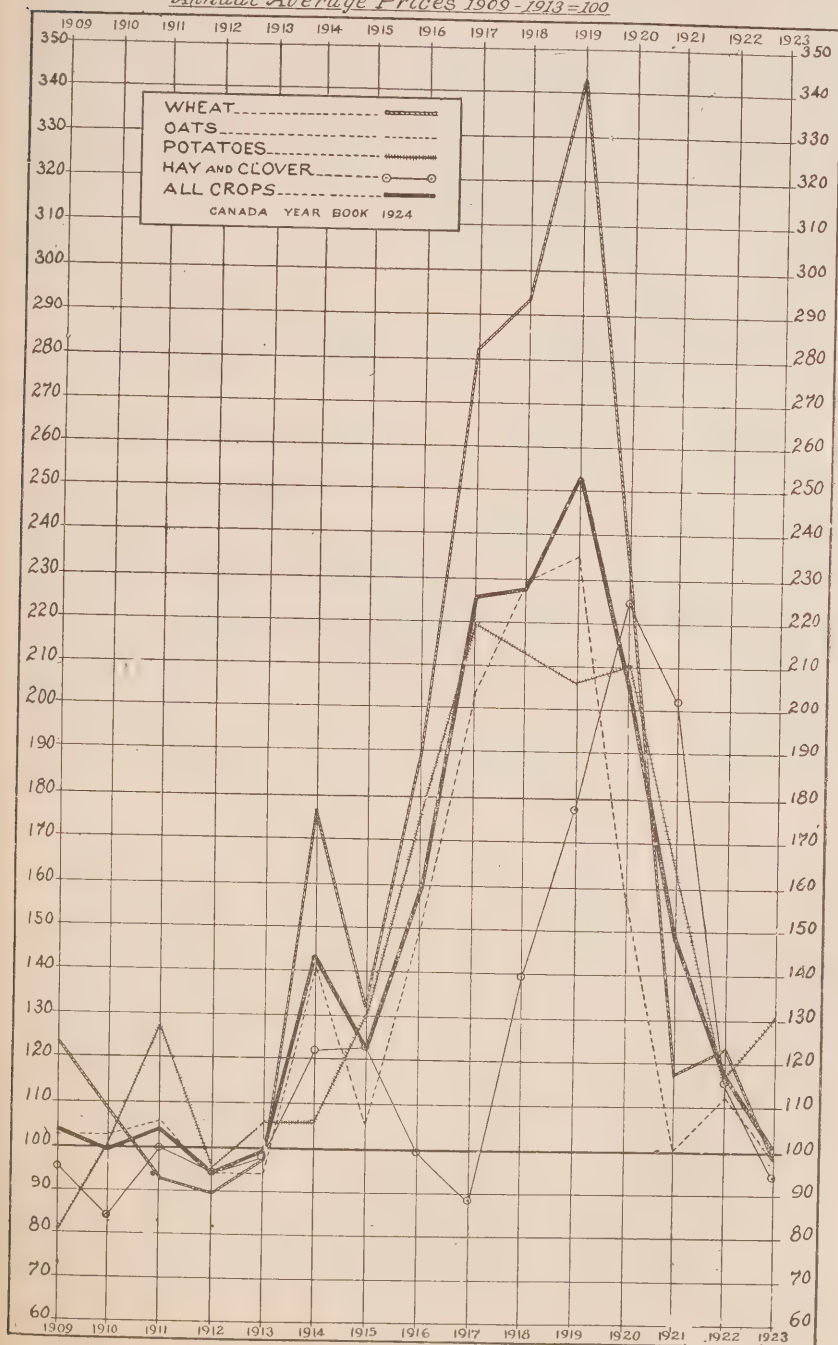
49.—Average Prices per lb. paid to Farmers by Seed Dealers, by Provinces, April, 1924, and Average Prices for Canada, April and May, 1919-24.

Provinces.	Red Clover.	Alsike.	Alfalfa.	Sweet Clover.	Timothy.	Blue Grass.	Western Rye.	Brome Grass.
	cents.	cents.	cents.	cents.	cents.	cents.	cents.	cents.
Prince Edward Island.....	26½	16½	—	15	11½	—	—	—
Nova Scotia.....	24	—	—	—	10	—	—	—
New Brunswick....	—	—	—	—	12	—	—	—
Quebec.....	24	17	—	6½	11½	—	—	—
Ontario.....	15½	9	16½	8	8	8	—	—
Manitoba.....	—	—	15	8½	9½	—	7	8
Saskatchewan.....	—	—	—	10	7	—	7½	7½
Alberta.....	—	—	—	—	12½	—	6	8
British Columbia..	—	—	—	—	—	—	—	—
Canada.....1924	18	11	16	8	9	8	7	8
1923	20	13	20½	7½	9	—	8	8½
1922	21	16½	23½	11½	9	—	10½	9
1921	29	28	26½	11	12½	—	11½	14
1920	66	56	55	29	20½	—	25	29
1919	44	36	38	23½	16	—	27	30½

Index Numbers of Agricultural Prices.—Records of the average prices received by farmers for agricultural produce have been collected annually since 1909 through the crop correspondents of the Census and Statistics Office and Dominion Bureau of Statistics. From these records, annual index numbers have been calculated for each crop and for the field crops as a whole. The average prices for the five-year pre-war period, 1909-1913, have in each case been taken as 100, and the figures for each year are expressed as a percentage of these. In calculating the index numbers for the combined field crops, the various crops have been weighted according to the proportion which the value of each crop in each year bears to the total value for that year. Table 50 and its accompanying diagram (p. 261) show the great increase which took place in agricultural prices during the war period and the fall which took place in 1920, 1921 and 1922. The years 1921 and 1922 are especially memorable for the great and sudden fall in the prices of agricultural produce, and the index numbers provide a convenient means of measuring its extent, and of making comparisons with previous years, and especially with the maximum

INDEX NUMBERS OF AVERAGE PRICES OF FIELD CROPS, 1909-23

Annual Average Prices 1909-1913=100



prices, which were reached in 1919. The year 1923 witnessed a further fall in the prices of grain. For wheat, oats, barley, and rye the prices of 1923 are actually lower than those of the base period, wheat by 1.4, oats by 2.9, barley by 10.6 and rye by 31 p.c. The fall is attributable to the universal abundance of the grain harvests of 1923. Wheat in 1923 is 98.6, as compared with 123.2 in 1922, oats 97.1 against 111.8, barley 89.4 against 97.9 and rye 69 against 81.7. Peas, beans, buckwheat, flaxseed, corn for husking, potatoes, turnips, and sugar beets remained well above the averages for 1909-13; but hay and clover and fodder corn were less, the former by 5.8 p.c. and the latter by 6.7 p.c. Alfalfa was exactly the same. For all crops taken together, the weighted index number of 1923 was 100.7, as compared with 117 for 1922, 147.5 for 1921, 204.9 for 1920 and 252.7 for 1919, the peak year.

50.—Index Numbers of Agricultural Prices for Canada, 1914-1923.

Annual Average Prices, 1909-1913 = 100.

Field Crops.	Annual average prices 1909-13. ¹	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.
	\$	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Wheat.....	0.69	176.8	131.9	189.9	281.2	292.8	343.5	234.7	117.4	123.2	98.6
Oats.....	0.34	141.2	105.9	150.0	202.9	229.4	235.3	155.9	100.0	111.8	97.1
Barley.....	0.47	142.9	110.6	174.5	229.8	212.8	261.7	176.6	100.0	97.9	89.4
Rye.....	0.71	110.7	108.4	156.3	228.2	209.9	197.2	187.3	101.4	81.7	69.0
Peas.....	1.00	146.0	165.0	222.0	354.0	299.0	286.0	242.0	196.0	179.0	172.0
Beans.....	1.79	129.1	170.4	301.7	416.2	302.2	250.3	216.8	162.0	159.2	148.6
Buckwheat.....	0.61	118.0	123.0	175.4	239.3	259.0	245.9	209.8	145.9	137.7	137.7
Mixed grains.....	0.57	115.7	100.0	154.4	203.5	200.0	238.5	157.9	108.7	105.3	193.5
Flaxseed.....	1.12	92.0	134.8	182.1	236.6	279.5	368.8	173.2	128.5	137.7	58.0
Corn for husking.....	0.63	112.7	112.7	169.8	292.1	277.8	206.3	184.1	131.7	131.7	146.0
Potatoes.....	0.46	106.5	130.4	176.1	219.6	213.1	206.5	210.8	167.3	117.4	130.4
Turnips, etc.....	0.22	122.7	109.1	177.3	209.1	195.1	227.3	186.4	154.5	122.7	136.4
Hay and clover.....	11.65	122.1	123.3	99.6	88.7	139.5	177.9	224.0	202.2	115.5	94.2
Fodder corn.....	4.95	99.2	99.2	99.4	103.8	124.2	139.8	156.6	142.4	100.4	93.3
Sugar beets.....	5.84	102.6	94.2	106.2	115.6	175.5	186.0	219.1	111.3	134.9	111.0
Alfalfa.....	11.59	122.3	109.4	92.2	100.0	153.9	188.5	205.3	172.1	110.2	100.0
All Field Crops...	-	143.0	122.6	159.7	226.0	227.6	252.7	204.9	147.5	117.0	100.7

¹ Prices quoted for 1909-13 are per bushel, except for the last four items, where they are per ton.

10.—Agricultural Statistics of the Census of 1921.

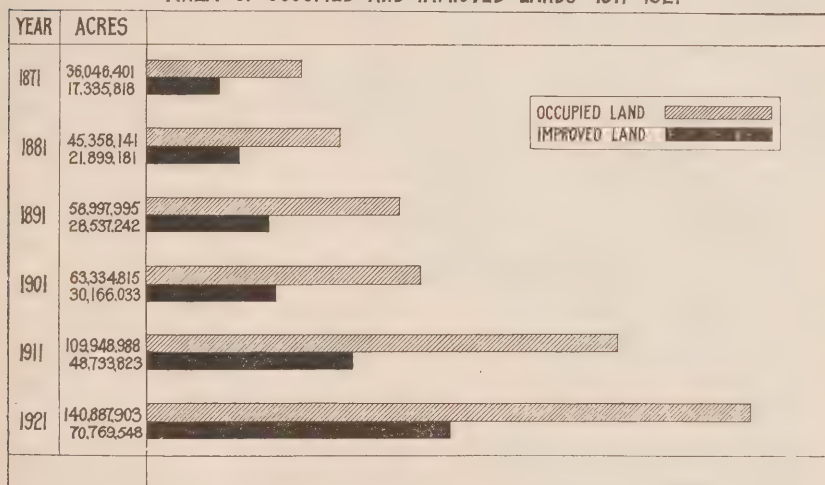
The Agricultural Statistics of the Census of 1921.—For the census of 1921, a farm was defined as a tract of land of one acre or over which produced in the year 1920 crops of any kind to the value of \$50 or more. In previous censuses the minimum area was not clearly defined, with the consequence that some plots of less than one acre were included. For the whole of Canada these numbered 33,615 in 1901 and 30,141 in 1911. They have been deducted from the total numbers of farms in their respective years wherever the latter are given in the comparative tables below, but as total acreage and production are affected only to a very slight extent by such farms, no deductions have been made in these respects. The figures relating to number of farms, farm areas, size and tenure of farms, are for June 1, 1921, the date of the census.

In this census of 1921 the areas devoted to agriculture on Indian reserves in Manitoba, Saskatchewan and Alberta have not been counted as farms, although the improved land on the reserves has been included in the total of farm acreage. This improved land on reserves has not been classified by kind of tenure;

so that it is necessary to subtract it from the total farm acreage before the calculation of percentages in which the classes by tenure are involved.

In Table 51 are given comparative statistics of farm holdings for 1901, 1911 and 1921, while figures of farm holdings for 1911 and 1921 are given by tenure in Table 52. A specially notable fact is the increase in the size of the average farm from 124 acres in 1901 to 198 acres in 1921—an increase of nearly 60 p.c., due, in the main, to the increasing use of machinery. It is also apparent from Table 52, that rented farms are gradually becoming a larger percentage of the total number.

AREA OF OCCUPIED AND IMPROVED LANDS 1871-1921



51.—Population, Farm Holdings and Areas, 1901, 1911 and 1921.

Items.		1921	1911	1901
		June 1.	June 1.	March 31.
Population of Canada ¹	No.	8,775,853	7,191,624	5,323,967
Urban.....	"	4,350,816	3,269,082	2,005,080
Rural.....	"	4,425,037	3,922,542	3,318,887
Number of occupied farms.....	"	711,090	682,329 ³	511,073 ²
Land area of provinces.....	acres	1,401,316,388	1,401,316,388	1,401,316,388
Area of occupied farms.....	"	140,887,903	108,968,715 ⁴	63,422,338
Improved.....	"	70,769,548	48,733,823	30,166,033
Unimproved.....	"	70,118,355	60,234,892 ⁴	33,256,305
In field crops.....	"	49,680,666	35,261,338	19,763,740
In orchard.....	"	297,053	403,596	356,106
In vineyard.....	"	7,090	9,836	5,600
In small fruits.....	"	17,741	17,495	5,600
Number of rural inhabitants, per farm ¹	No.	6.18 ⁵	5.70 ⁵	6.49 ⁵
Average area of farm.....	acres	197.97 ⁶	159.60 ⁶	124.10
Average area of improved land in farm.....	"	99.36 ⁶	71.33 ⁶	59.02
Per cent of total land area in occupied farms ¹	p.c.	10.05	7.78	4.53
Per cent of farm land improved.....	"	50.23	44.72	47.56

¹ Exclusive of Yukon and Northwest Territories. The total population of Canada in 1921 was 8,788,483, while the total land area is placed at 3,603,909 square miles.

² After deduction of 33,615 farms under 1 acre (the minimum area taken in 1921).

³ Exclusive of 30,141 farms under 1 acre (see Note 2) and 2,176 farms located on Indian reserves in the Prairie Provinces.

⁴ After deduction of unimproved acreage on Indian reserves in Prairie Provinces.

⁵ Not separately given in 1901.

⁶ Exclusive of Indian reserves in Prairie Provinces.

52.—Farm Holdings and Areas, by Tenure, 1911 and 1921.

Items.	1921.	1911.	Increase ¹ .	
	No.	No.	No.	p.c.
NUMBER OF FARMS.				
All occupied farms.....	711,090	682,329 ²	28,761	4.22
Occupied by owner or manager.....	615,180	603,971 ²	11,209	1.86
Occupied by tenant.....	55,948	54,013 ²	1,935	3.58
Occupied by part owner, part tenant.....	39,962	24,345 ²	15,617	64.15
AREA.				
	acres.	acres.	acres.	p.c.
Total area occupied.....	140,887,903 ³	103,968,715 ³	31,919,188	29.29
Owned or managed by occupier.....	120,175,428	97,819,420	22,356,003	22.85
Rented by occupier.....	20,593,347	11,032,900	9,515,447	85.86

¹ Minus sign denotes decrease.

² After deduction of farms under 1 acre and those situated on Indian reserves in Prairie Provinces.

³ Total area includes improved acreage of Indian reserves in Prairie Provinces which has not been classified by tenure.

11.—Miscellaneous Agricultural Statistics.

Cost of Grain Production.¹—In 1912, for the year 1911, and again in 1914, for the year 1913, the Census and Statistics Office (now the Dominion Bureau of Statistics), with the aid of its crop correspondents, carried out special inquiries respecting the average cost per acre of grain-growing in Canada. The inquiries were limited to wheat, oats, rye, barley, corn for husking and flaxseed. In view of changed conditions, the data secured in the years 1912 and 1914 ceased to be applicable and it was, therefore, decided to institute fresh inquiries. Accordingly, on February 11, 1924, a schedule of questions on the cost of grain production in 1923 was issued to regular crop correspondents of the Dominion Bureau of Statistics and also to a number of practical farmers in the immediate vicinity of the Dominion Experimental Farms and Stations. The inquiry for 1923 was made in two main divisions, one relating to Eastern Canada and British Columbia, and the other to the three Prairie Provinces of Manitoba, Saskatchewan and Alberta. The main results, showing the average itemized costs of production per acre, are presented in Tables 53 to 56. Table 53 gives the averages for Canada as a whole, Table 54 for Eastern Canada, and Table 55 for the three Prairie Provinces taken together. In Table 56 the average total cost of production, value of produce and profit or loss per acre, are compared by provinces for the three years 1911, 1913 and 1923.

The year 1923 saw a further decline in the average price of wheat per bushel, as received by farmers. It fell in Saskatchewan from 85 cents in 1922 to 65 cents in 1923, whilst in 1920 it was \$1.55 and in 1919 \$2.32. The cause of the further decline in 1923 was undoubtedly the general abundance of the wheat crop in all the wheat-growing countries of the world. This is rather a rare occurrence, and there has since been a marked recovery in price, due to the great falling off of production in 1924.

¹The results of the inquiries of 1912 and 1914 were published in detail in the Census and Statistics Monthly for March, 1912 (Vol. 5, No. 46, pp. 46-51), and December, 1914 (Vol. 7, No. 76, pp. 299-306). They were also summarized in the Canada Year Book, 1914, pp. 193-202. A detailed report of the results of the inquiry of 1923 was published by the Dominion Bureau of Statistics, Ottawa, 22 pages 8 vo., 1924, and an abridgment thereof appeared in the Monthly Bulletin of Agricultural Statistics for June, 1924 (Vol. 17, No. 190, pp. 178-191).

53.—Average Cost per Acre of Grain Production in Canada, 1923.

Items.	Spring Wheat. ¹	Spring Wheat. ²		Oats.	Rye.	Barley.	Flaxseed.
		After stubble.	After fallow.				
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Preparation.....	4 08	2 48	4 08	3 25	2 91	3 23	2 93
Seed.....	2 78	1 37	1 46	1 47	1 21	1 50	1 54
Seeding.....	1 05	0 57	0 58	0 78	0 73	0 92	0 65
Cultivation.....	1 00	0 57	0 77	0 68	0 62	0 70	0 62
Harvesting.....	2 18	1 72	1 88	1 97	1 78	1 91	1 66
Threshing.....	1 91	2 43	3 10	2 65	2 03	2 28	3 02
Cleaning and hauling.....	1 87	1 38	1 67	1 81	1 39	1 63	1 19
Wear and tear, implements.....	0 68	0 56	0 66	0 62	0 57	0 62	0 66
Rental value.....	3 93	2 92	3 86	3 30	3 09	3 30	3 27
Total.....	19 48	14 00	18 06	16 53	14 33	16 09	15 64

¹Eastern Canada and British Columbia. ²Prairie Provinces.

54.—Average Cost per Acre of Grain Production in Eastern Canada, 1923.

Items.	Fall Wheat.	Spring Wheat.	Oats.	Rye.	Barley.	Corn.	Flaxseed.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Preparation.....	4 34	4 12	4 05	4 16	4 00	4 49	4 64
Seed.....	2 00	2 84	1 99	1 84	2 06	1 10	2 34
Seeding.....	0 84	1 07	1 04	1 17	1 61	1 66	1 38
Cultivation.....	1 34	1 07	0 97	1 02	1 02	3 38	1 42
Harvesting.....	2 08	2 14	2 20	2 11	2 15	3 65	3 35
Threshing.....	1 67	1 80	1 88	1 57	1 83	3 77	2 88
Cleaning and hauling.....	1 74	1 83	1 81	1 71	1 78	2 25	2 75
Wear and tear, implements.....	0 72	0 67	0 69	0 71	0 67	0 82	0 96
Rental value.....	4 09	3 56	3 59	3 40	3 59	3 94	4 69
Total.....	18 82	19 10	18 20	17 69	18 71	25 06	24 51

55.—Average Cost per Acre of Grain Production in the Prairie Provinces, 1923.

Items.	Spring Wheat.		Oats.	Rye.	Barley.	Flax seed.
	After stubble.	After fallow.				
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Preparation.....	2 43	4 08	2 57	2 40	2 55	2 66
Seed.....	1 37	1 46	1 02	0 94	1 00	1 42
Seeding.....	0 57	0 58	0 57	0 57	0 57	0 54
Cultivation.....	0 57	0 77	0 43	0 49	0 52	0 54
Harvesting.....	1 72	1 88	1 76	1 65	1 70	1 45
Threshing.....	2 43	3 10	3 25	2 17	2 64	3 01
Cleaning and hauling.....	1 37	1 67	1 79	1 24	1 52	1 06
Wear and tear, implements.....	0 56	0 66	0 56	0 52	0 56	0 61
Rental value.....	2 93	3 86	2 89	2 79	2 84	3 09
Total.....	14 00	18 06	14 84	12 77	13 90	14 38

56.—Average Cost of Production, Value and Profit or Loss per Acre of Wheat, Oats, Barley, Flaxseed and Corn for Husking, by Provinces, 1911, 1913 and 1923.

Provinces and Crops.	Total Cost.			Value of Produce.			Profit or Loss (—).		
	1911.	1913.	1923.	1911.	1913.	1923.	1911.	1913.	1923.
Canada—	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Fall wheat.....	13 57	13 80	19 21	20 64	20 94	24 82	7 07	7 14	5 61
Spring wheat.....	12 87	12 90	19 48	16 58	17 15	27 06	3 71	4 25	7 58
Oats.....	12 61	12 58	16 53	16 27	15 00	17 60	3 98	2 42	1 07
Barley.....	12 19	12 16	16 09	17 54	16 00	19 12	5 35	3 84	3 03
Corn.....	21 88	19 02	25 06	30 38	30 27	42 28	8 50	11 25	17 22
Flaxseed.....	12 52	12 13	15 54	19 85	13 31	22 71	7 33	1 18	7 17
P.E. Island—									
Spring wheat.....	11 79	12 07	16 14	19 08	21 32	23 93	7 29	9 25	7 79
Oats.....	11 24	11 22	14 90	16 60	16 00	18 10	5 36	4 78	3 20
Barley.....	11 07	11 25	15 87	16 12	18 66	22 82	5 05	7 41	6 95
Nova Scotia—									
Spring wheat.....	21 31	21 15	29 83	23 25	21 53	30 21	3 02	2 10	0 38
Oats.....	20 05	19 21	28 17	21 60	20 33	31 27	2 45	2 39	3 10
Barley.....	19 29	19 64	28 22	22 25	20 11	32 43	4 58	2 61	4 21
New Brunswick—									
Spring wheat.....	14 31	15 96	21 59	21 17	25 77	30 51	6 86	9 81	8 92
Oats.....	13 49	15 48	20 11	19 26	18 40	22 36	5 77	2 92	2 25
Barley.....	12 45	15 30	19 78	20 59	20 57	29 64	8 14	5 27	9 86
Quebec—									
Spring wheat.....	14 24	13 53	19 12	20 64	22 37	31 22	6 40	8 84	12 10
Oats.....	13 95	12 30	18 31	20 19	16 50	25 89	6 24	4 20	7 58
Barley.....	13 28	12 64	18 41	20 14	20 74	30 12	6 86	8 10	11 71
Corn.....	20 00	20 12	23 82	33 11	32 01	45 52	13 11	11 89	21 70
Flaxseed.....	14 63	13 82	27 57	20 73	22 42	38 63	6 10	8 60	11 06
Ontario—									
Fall wheat.....	14 10	14 07	18 82	22 36	21 78	23 79	8 26	7 71	4 97
Spring wheat.....	12 71	12 83	17 95	16 16	18 58	21 31	3 45	5 75	3 36
Oats.....	12 17	12 43	17 27	14 76	16 70	18 89	2 59	4 27	1 62
Barley.....	12 07	12 63	20 82	18 43	18 42	21 76	6 36	5 79	0 94
Corn.....	19 48	17 76	26 40	28 13	28 60	39 46	8 65	10 84	13 06
Flaxseed.....	14 00	15 72	21 17	21 55	19 84	25 11	7 55	4 12	3 94
Manitoba—									
Spring wheat.....	11 47	11 47	12 85	16 67	14 12	10 19	5 20	2 65	—2 66
Oats.....	11 22	11 17	12 94	16 00	12 56	11 37	4 78	1 39	—1 57
Barley.....	11 02	10 82	12 41	17 00	11 84	11 55	5 98	1 02	—0 86
Flaxseed.....	11 49	11 02	13 64	22 00	14 42	20 06	10 51	3 40	6 42
Saskatchewan—									
Spring wheat.....	12 18	12 53	13 96	13 60	14 25	14 02	1 42	1 72	0 06
Oats.....	13 07	12 77	15 36	14 30	12 25	14 26	1 23	0 52	—1 10
Barley.....	11 29	11 23	14 19	14 37	11 67	14 15	3 08	0 44	—0 04
Flaxseed.....	12 60	11 69	14 73	19 41	10 73	22 73	6 81	—0 96	8 00
Alberta—									
Spring wheat.....	12 38	12 44	15 51	13 85	14 53	18 27	1 47	2 09	2 76
Oats.....	12 29	12 06	16 82	14 87	12 78	15 65	2 58	0 72	—1 17
Barley.....	11 45	11 62	16 00	15 21	12 43	16 34	3 76	0 81	0 34
Flaxseed.....	11 56	11 31	15 91	17 83	11 38	21 91	6 27	0 07	6 00
British Columbia—									
Fall wheat.....	16 58	27 02	22 48	28 00	40 14	30 88	11 42	13 12	8 40
Spring wheat.....	19 68	23 89	23 83	36 00	32 58	28 31	16 32	8 69	4 48
Oats.....	22 37	25 52	24 39	34 00	30 20	29 00	11 63	4 68	4 61
Barley.....	22 54	—	23 94	36 00	—	27 62	13 46	—	3 68

¹Including fertilizers.

Transportation and Marketing of Wheat.—Canadian wheat marketed overseas incurs a great variety of expenses, including freight charges, commissions, inspection fees, insurance, dealers' profits, loading, unloading, etc. An investigation carried out for the year 1923 by the Internal Trade Division of the Dominion Bureau of Statistics has ascertained what these expenses amount to, on the basis of the delivery of an imaginary cargo of 1,000 bushels of wheat from an average western point to Liverpool. The chief items are as follows: freight by rail \$150; freight by inland waters \$82.92; ocean freight \$62.10; commission, profits, fees, interest, loading and other handling charges \$87.03; insurance \$15.26. The average cost therefore of the transportation to and marketing at Liverpool of 1,000 bushels of wheat from a central point in the Prairie Provinces was, in 1923, \$397.31, representing about 40 cents per bushel.¹

¹For detailed statement, see Monthly Bulletin of Agricultural Statistics for October, 1924 (Vol. 17, No. 194, pp. 303-4).

Agricultural Irrigation.—This is now being successfully practised in the drier parts of western Canada, particularly in southern Alberta and in certain districts of British Columbia, where water is artificially stored and distributed for use in fruit-growing. In Saskatchewan, Alberta and the Northwest Territories, the construction of irrigation works is regulated by the Irrigation Act (R.S. 1906, c. 61) and amendments thereto, and these Acts are now administered by the Water Power and Reclamation Branch of the Department of the Interior. The Irrigation District Act of the Alberta Legislature (R.S.A. 1922, c. 114) and amending statutes provide for the formation of irrigation districts under the Irrigation Act of the Parliament of Canada, and authorize the raising of loans under by-laws adopted by voters of the districts. In British Columbia (except in the Railway Belt) the granting of water rights comes under provincial jurisdiction, and is under administration by the Comptroller of Water Rights, Department of Lands, Victoria, B.C. Table 57, furnished by the Department of the Interior, gives for nine irrigation projects in southern Alberta the source of the water supply and the areas under irrigation.

57.—Statistics of Irrigation Projects in Southern Alberta, 1923.

Projects.	Source of water supply.	Area of tract irrigated.	Irrigable area.	Ditches constructed.	Area irrigated in 1923.
		acres.	acres.	miles.	acres.
C.P.R. Western Section.....	Bow River....	1,145,336	218,980	1,467-0	3,074
C.P.R. Eastern Section.....	Bow River....	1,212,074	400,000	2,500-0 ¹	42,928
C.P.R. Lethbridge Section.....	St. Mary R....	434,509	130,000	225-0 ²	72,345
Canada Land and Irrigation Co. ³	Bow River....	452,482	202,640	366-0	11,249
Taber Irrigation District.....	St. Mary R....	30,365	17,245	73-5	3,623
Lethbridge Northern Irrigation District ⁴	Oldman R....	231,220	105,000	573-0	6,963
United Irrigation District.....	Belly R....	61,195	36,158	172-8	2,000
New West Irrigation District.....	Bow River....	8,000	4,501	21-0	40
Little Bow Irrigation District.....	Highwood R....	11,490	2,821	2-7	-
Total.....		3,586,671	1,117,345	5,401-0	142,222

¹Approximate. ²Excluding laterals. ³Partly constructed. ⁴Partial operation commenced in 1923.

Under the Alberta Act a number of irrigation districts have constructed works, and as each district is a corporate body similar to a municipality, they have been included in the table. It will be observed that the total area of the irrigated tracts of the nine projects in Table 57 is 3,586,671 acres, the irrigable area is 1,117,345 acres, the mileage of ditches constructed is 5,401, and the area irrigated in 1923 was 142,222 acres.

Irrigation Projects of Canadian Pacific Railway.—The oldest irrigation projects in Alberta are those of the Canadian Pacific Railway company. These are divided into three sections: Western, Eastern and Lethbridge. The gross area of the western project is, as shown in the table, 1,145,336 acres, of which 218,980 acres are classified as irrigable. The project has been in operation for 17 years. In 1922 the area under irrigation was 49,752 acres, and the principal crop, which was wheat, represented over 50 p.c. of the total crop area. In the eastern section the area actually under irrigation during the year 1922 was 93,375 acres, as compared with 88,299 acres in 1921, an increase of 5,076 acres. The value of the crops from the irrigated lands was estimated at \$1,400,000, and the average price obtained for wheat was 82 cents per bushel, for alfalfa \$11 per ton and for alfalfa seed \$24 per bushel. More particulars are available as regards the Lethbridge section, which in 1923 included a gross irrigable area of 130,000 acres. In 1922 it was reported that practically all the land had been sold and approximately 80 p.c. of the area lying below the canals was under cultivation. The total area irrigated

during the season was 75,558 acres, as compared with 56,450 acres in 1921, being an increase of 19,108 acres. The average value of the crops raised on the irrigated lands was \$23.07 per acre, and the total value of the crops grown was \$1,339,084 on the irrigated and \$230,000 on the non-irrigated lands.

Hops.—Hops are not grown in Canada to any large extent except in the province of British Columbia. The census showed that the acreage planted to hops by provinces in 1921 was as follows: Ontario, 4; British Columbia, 510; total for Canada, 514. The total production for 1920, according to the census, was 758,555 lb. of the value of \$385,265 from 520 acres, of which 755,545 lb., of the value of \$383,659 from 510 acres, were grown in British Columbia. Table 58 shows the area, yield and value of hops in British Columbia for each of the years 1910, 1913-17 and 1919-23. The figures for the years 1910 and 1920 are those of the decennial census; for the years 1913-1917, 1919 and 1921-1923, they represent the estimates of the provincial Department of Agriculture at Victoria, B.C. There are no data for the year 1918.

58.—Area, Yield and Value of Hops in British Columbia, 1910, 1913-17, 1919-23.

Years.	Area.	Yield per acre.	Total yield.	Average price per lb.	Total value.
	acres.	lb.	lo.	cents.	\$
1910.....	825	1,228	1,013,400	22	224,260
1913.....	611	1,699	1,038,089	30	311,427
1914.....	611	1,584	967,924	24	232,278
1915.....	611	1,408	850,580	16	143,430
1916.....	585	1,939	1,134,315	23	260,832
1917.....	333	810	269,730	50	134,265
1919.....	444	760	337,440	60	202,464
1920.....	510	1,481	755,545	51	383,659
1921.....	507	1,705	864,435	47	406,284
1922.....	507	1,343	680,901	40	272,360
1923.....	507	1,972	999,804	40	399,922

Municipal Hail Insurance in the Prairie Provinces.—In addition to insurance against hail by ordinary joint stock insurance companies, legislation has been enacted by each of the three Prairie Provinces providing for insurance against loss to crops by hailstorms through a system of co-operative municipal hail insurance. In Manitoba legislative facilities exist under the Manitoba District Hail Insurance Act, 1920; but the necessary number of municipalities have not as yet combined to start the system therein provided for. In Saskatchewan and Alberta government insurance against hail had its origin in 1910. At the present time municipal hail insurance in Saskatchewan is effected under the Saskatchewan Municipal Hail Insurance Act, 1920, and in Alberta under the Alberta Hail Insurance Act, 1918. The principle of the Saskatchewan Act is the assessment of a fixed rate per acre, and an additional rate, if necessary, upon land under crop in municipalities consenting to participate in the plan, and the payment of compensation at fixed rates per acre for insured crops destroyed by hail, the system being administered by a popularly elected body known as the Saskatchewan Municipal Hail Insurance Association. In Alberta the rate is set on September 16 of each year, is determined by the losses of the past year and the tax is imposed only on the acreage insured. The Act is administered by the Municipal Hail Insurance Board and is in operation in all municipal districts. The crops covered by this class of insurance include wheat, oats, barley, flax, rye and speltz. According to the Public Service Monthly of Dec. 1924, the total tax revenue in Saskatchewan for hail insurance in 1924 was estimated at \$960,000, and the amount paid for losses by the Hail Insurance Association was \$514,250. The Association has a reserve fund of about

\$1,500,000. The hail loss in Saskatchewan in 1924 was less than half the 1923 total. The annual report for the year ended January 31, 1924, of the Alberta Hail Insurance Board showed that in 1923 over 2,240,000 acres were insured at rates of \$6, \$8, and \$10 per acre, making a total risk of over \$21,000,000. At the end of the season there were 5,329 claims, and the total awards for indemnity amounted approximately to \$2,411,000. The year 1923, which was a record one for Alberta in respect of yield, was also one in which very heavy hail damage was sustained, and the premium rate of 12 p.c. was the highest ever set under the municipal plan. During the five years' operation of the present Act, the total assessment amounted to \$7,376,000 and the amount paid out in losses to \$6,260,000. The surplus in hand is over \$500,000. The report also states that out of every dollar charged to the farmer for premiums, 85 cents were returned to claimants for awards, 8½ cents represent the cost of administration and 6½ cents are in the surplus account.

Flax Fibre.—According to estimates furnished by the Economic Fibre Production Division of the Experimental Farms, the area sown to flax for fibre in Ontario in 1923 was 3,300, as compared with 1,200 acres in 1922, 6,515 acres in 1921 and 31,300 acres in 1920. Of the acres sown in 1923, the produce from 1,485 acres was converted into fibre and that from the remaining 1,815 acres was manufactured into upholstery tow. The yield obtained from the 1,485 acres was 272,650 lb. of long fibre and 148,500 lb. of tow. All the long fibre was sold in Belfast at the average price of 21 cents per lb.; 90 p.c. of the tow was sold in Belfast at an average price of 7 cents per lb.; the remaining 10 p.c. was marketed in the United States. The upholstery tow, which averaged one ton per acre, was sold to upholstery firms in Ontario at prices ranging from \$50 to \$65 per ton. The yield of seed from the total crop was 20,000 bushels of the value of \$50,000, an average per bushel of \$2.50. The total value of the produce of the flax fibre crop of 1923 was about \$111,375.

12.—World's Production of Cereals and Potatoes.

Table 59, constructed from data published by the International Institute of Agriculture, shows the area and yield of wheat, rye, barley, oats, corn and potatoes for the years 1922 and 1923 in countries of the northern hemisphere, and for the years 1922-23 and 1923-24 in countries of the southern hemisphere (Argentina, Chile, Uruguay, Australia and New Zealand). The annual average areas and yields are also given for the five-year period 1917-21 (1917-18 to 1921-22), and the areas and yields of 1923 (1923-24) are compared with those of the five-year averages in percentages.

Wheat.—For 45 countries the production of wheat in 1923 was 3,458,375,000 bushels from 217,865,000 acres, as compared with 3,137,077,000 bushels from 216,534,000 acres in 1922 and 2,915,451,000 bushels from 209,144,000 acres, the five-year average for the years 1917-21 (1917-18 to 1921-22). As compared with 1922, the total area and yield of wheat in these countries showed increases of 0.6 and 10.2 p.c. respectively, and as compared with the average the increases were 4.2 and 18.6 p.c. respectively.

Rye.—In 28 countries the production was 937,738,000 bushels from 46,213,000 acres in 1923, as against 854,107,000 bushels from 47,496,000 acres in 1922 and 777,154,000 bushels from 43,221,000 acres, the average for the five years 1917 to 1921. The area under rye was 2.7 p.c. less and the yield 9.8 p.c. more than in 1922. As compared with the five-year average the area was 6.9 and the yield 20.7 p.c. more.

Barley.—In 42 countries the total yield in 1923 was 1,293,511,000 bushels from 56,073,000 acres, as compared with 1,165,487,000 bushels from 53,139,000 acres in 1922 and with 1,138,372,000 bushels from 53,474,000 acres, the five-year average. The area in 1923 is 5·5 and the yield 11 p.c. more than in 1922 and 4·9 and 13·6 p.c. more than the five-year average.

Oats.—In 38 countries the total production in 1923 was 3,602,517,000 bushels from 105,276,000 acres, as compared with 3,172,422,000 bushels from 101,666,000 acres in 1922 and with 3,194,248,000 bushels from 105,141,000 acres, the five-year average. The area is 0·6 and the yield 13·5 p.c. more than in 1922 and 0·1 and 12·8 p.c. more than the average.

Corn.—In 24 countries the production was 3,959,065,000 bushels from 145,465,000 acres in 1923, as against 3,655,112,000 bushels from 143,651,000 acres in 1922 and 3,652,669,000 bushels from 143,230,000 acres, the average for the five years. The area of 1923 is 1·3 and the yield 8·3 p.c. more than in 1922, whilst compared with the averages, the area is 1·6 and the yield 8·4 p.c. more.

Potatoes.—In 36 countries the yield for 1923 was 2,612,407,000 short cwt. from 29,781,000 acres as compared with 3,224,802,000 cwt. from 30,378,000 acres in 1922 and with 2,217,372,000 cwt. from 28,268,600 acres, the five-year average. The acreage in 1923 was 2 and the yield 19 p.c. less than in 1922 and compared with the five-year average, the area was 5·4 and the yield 17·8 p.c. more.

59.—Acreage and Production of Cereals and of Potatoes in Countries of the World, 1922 and 1923.

Countries.	1922.	1923.	Average 1917-21.	1923 in p.c. of average.	1922.	1923.	Average 1917-21.	1923 in p.c. of average.
	000 acres.	000 acres.	000 acres.	p.c.	000 bush.	000 bush.	000 bush.	p.c.
Wheat—								
Germany.....	3,396	3,653	3,380	108·1	71,934	103,605	89,798	115·4
Austria.....	460	475	373	127·2	7,422	8,889	5,693	156·1
Belgium.....	300	346	331	104·5	10,615	13,376	11,778	113·6
Bulgaria.....	2,226	2,303	2,208	104·3	37,705	36,224	29,621	122·3
Denmark.....	237	205	160	128·2	9,249	8,858	7,017	126·2
Spain.....	10,309	10,489	10,318	101·7	125,471	157,112	138,279	113·6
Estonia.....	52	24	32	75·9	760	370	449	82·4
Serb-Croat-Slovene State..	3,673	3,843	3,623	106·0	44,472	61,069	47,411	128·8
Finland.....	38	40	21	187·3	710	472	335	141·0
France.....	13,072	13,673	12,507	109·3	243,318	275,573	249,166	110·6
England and Wales.....	1,967	1,740	2,109	82·5	62,492	56,821	65,699	86·5
Scotland.....	65	59	68	86·7	2,520	2,320	2,672	86·8
Northern Ireland.....	6	7	12	60·9	214	228	386	59·2
Greece.....	890	1,071	1,044	102·5	9,553	13,356	10,722	124·6
Irish Free State.....	70	32	46	69·3	958	1,040	784	132·7
Hungary.....	3,523	3,320	2,775	119·6	54,730	67,706	45,505	148·8
Italy.....	11,489	11,554	11,088	104·2	161,643	224,839	166,368	135·1
Latvia.....	70	104	46	127·5	958	1,640	784	209·3
Lithuania.....	194	202	163	123·7	3,274	2,965	2,562	115·8
Luxemburg.....	23	16	26	61·2	173	301	478	63·0
Norway.....	25	26	37	69·5	643	587	912	64·4
Netherlands.....	150	164	154	99·9	6,063	6,112	5,773	105·9
Poland.....	2,514	2,514	2,123	118·4	42,452	49,735	37,723	131·8
Portugal.....	1,123	1,055	1,033	102·1	9,782	13,190	8,997	146·6
Rumania.....	6,548	6,648	5,524	120·3	92,008	102,121	69,937	146·0
Sweden.....	356	363	354	102·4	9,381	11,082	9,613	115·3
Switzerland.....	152	160	182	87·9	3,571	5,453	5,637	96·7
Czecho-Slovakia.....	1,527	1,507	1,561	96·5	33,621	36,226	32,522	111·4
Malta.....	10	9	12	72·5	258	248	299	83·0
Canada.....	22,423	22,672	18,546	122·2	399,786	474,199	236,025	200·9
United States.....	62,317	58,308	60,961	95·6	867,598	785,741	834,806	94·1
Guatemala.....	28	28	24	114·5	223	349	348	100·2
Mexico.....	1,420	1,138	2,347	48·5	13,626	8,217	13,220	62·2
Cyprus.....	191	191	162	118·2	2,496	2,611	2,225	117·3
British India.....	28,207	30,844	29,628	104·1	366,987	372,661	330,885	112·6
Japan.....	1,229	1,196	1,338	89·4	27,617	28,403	29,951	94·8
Algeria.....	3,100	3,166	3,086	102·6	16,987	36,395	28,457	127·9
Egypt.....	1,518	1,537	1,275	120·5	36,648	40,654	32,167	126·4
French Morocco.....	2,068	2,249	1,880	119·6	12,894	20,050	19,187	104·5

59.—Acreage and Production of Cereals and of Potatoes in Countries of the World, 1922 and 1923—continued.

Countries.	1922.	1923.	Average 1917-21.	1923 in p.c. of average.	1922.	1923.	Average 1917-21.	1923 in p.c. of average.
	000 acres.	000 acres.	000 acres.	p.c.	000 bush.	000 bush.	000 bush.	p.c.
Wheat—concluded.								
Tunis.....	882	1,559	1,454	107.2	3,674	9,921	8,416	117.9
Argentina.....	16,255	17,216	16,241	106.0	195,844	247,039	192,752	128.2
Chile.....	1,473	1,444	1,255	115.1	25,937	27,521	22,031	124.9
Uruguay.....	663	1,056	802	131.7	5,152	13,344	8,722	153.0
Australia.....	9,959	9,498	8,595	110.5	107,263	125,654	102,264	122.9
New Zealand.....	276	171	240	71.3	8,395	4,098	7,075	57.9
Total.....	216,534	217,865	209,144	104.2	3,137,077	3,458,375	2,915,451	118.6
Rye—								
Germany.....	10,237	10,786	10,628	101.5	206,052	282,455	233,181	121.1
Austria.....	834	922	730	126.3	13,589	15,836	10,765	147.1
Belgium.....	531	573	535	107.1	18,384	20,787	17,982	115.6
Bulgaria.....	442	425	465	91.4	7,453	6,862	6,186	110.9
Denmark.....	547	575	536	107.1	14,284	15,146	12,390	122.8
Spain.....	1,757	1,802	1,803	99.9	26,252	28,076	26,779	104.2
Estonia.....	392	402	343	117.2	5,797	6,511	5,710	114.0
Serb-Croat-Slovene State.....	487	462	475	97.3	4,523	5,906	6,131	96.3
Finland.....	586	583	586	99.5	10,531	9,448	9,918	95.3
France.....	2,196	2,216	2,128	104.1	38,412	36,517	35,700	102.3
Greece.....	1,198	217	222	97.5	2,362	2,662	3,151	84.5
Hungary.....	1,663	1,620	1,408	115.0	25,148	31,275	21,856	143.1
Italy.....	320	315	316	99.7	5,563	6,484	5,675	114.3
Latvia.....	590	649	561	115.7	6,845	10,770	9,806	109.8
Lithuania.....	1,369	1,442	1,196	120.6	24,249	23,890	18,336	130.3
Luxemburg.....	20	19	19	99.5	250	392	360	108.9
Norway.....	30	27	35	78.6	862	742	955	77.7
Netherlands.....	500	519	486	106.9	16,884	14,353	14,387	99.8
Poland.....	11,225	11,478	9,619	119.3	197,375	234,730	175,860	133.5
Portugal.....	665	550	671	81.9	5,294	5,222	4,392	118.9
Rumania.....	659	668	793	84.2	9,206	9,607	9,263	103.7
Sweden.....	872	869	903	96.3	22,678	24,401	20,959	116.4
Switzerland.....	55	48	51	94.6	1,693	1,646	1,576	104.4
Czechoslovakia.....	2,174	2,123	2,202	96.4	51,098	53,339	43,339	123.1
Canada.....	2,105	1,448	802	180.5	32,373	23,232	11,066	200.9
United States.....	6,672	5,157	5,465	94.4	103,362	63,023	70,426	89.5
Argentina.....	366	315	238	132.2	3,526	4,368	923	473.2
Chile.....	4	3	5	68.9	62	58	82	70.7
Total.....	47,496	46,213	43,221	106.9	854,107	937,738	777,154	120.7
Barley—								
Germany.....	2,847	3,214	2,831	113.5	73,838	109,324	82,210	132.9
Austria.....	313	334	246	135.4	5,599	7,855	4,576	171.7
Belgium.....	80	85	88	96.1	3,438	4,182	4,306	97.1
Bulgaria.....	334	544	539	100.9	11,941	11,063	8,970	123.3
Denmark.....	667	690	597	115.6	30,433	32,457	23,225	139.3
Spain.....	4,082	4,540	4,225	107.4	77,534	111,862	86,010	130.1
Estonia.....	331	312	269	116.1	6,670	4,097	4,415	92.8
Serb-Croat-Slovene State.....	927	891	918	97.0	11,070	14,065	13,289	105.8
Finland.....	277	277	284	97.4	6,466	3,789	5,117	74.1
France.....	1,713	1,684	1,607	104.8	40,909	45,025	34,329	181.2
England and Wales.....	1,364	1,327	1,509	87.9	44,620	45,033	47,889	94.0
Scotland.....	157	159	172	92.2	6,133	5,800	6,430	90.2
Northern Ireland.....	3	2	3	72.4	96	94	111	85.1
Irish Free State.....	168	151	183	82.5	7,074	5,568	7,456	74.7
Greece.....	391	400	361	110.7	6,770	7,101	6,496	109.3
Hungary.....	1,145	1,137	1,225	92.8	22,170	27,271	21,540	126.6
Italy.....	576	569	530	107.5	8,254	10,500	9,022	116.4
Latvia.....	391	434	361	120.3	6,770	6,021	6,496	92.7
Lithuania.....	417	432	395	109.6	10,725	7,957	6,097	130.5
Luxemburg.....	9	9	6	148.3	177	201	111	181.1
Norway.....	132	125	148	84.1	4,483	3,282	4,916	66.8
Netherlands.....	61	59	57	102.8	3,196	2,946	2,683	109.8
Poland.....	2,825	2,964	2,609	113.6	59,560	76,037	58,151	130.8
Portugal.....	191	170	175	96.9	3,141	2,453	1,560	157.2
Rumania.....	4,269	4,642	3,669	126.5	93,780	60,870	56,430	107.9
Sweden.....	427	392	421	93.4	13,830	11,781	11,828	99.6
Switzerland.....	16	16	19	84.3	482	570	631	90.2
Czechoslovakia.....	1,668	1,697	1,662	102.1	46,352	54,982	42,355	129.8
Malta.....	6	7	7	96.5	221	291	205	141.9
Canada.....	2,599	2,785	2,708	102.8	71,865	76,998	62,351	123.5
United States.....	7,317	7,905	8,032	98.4	182,068	198,185	186,854	106.1

59.—Acreage and Production of Cereals and of Potatoes in Countries of the World, 1922 and 1923.—continued.

Countries.	1922.	1923.	Average 1917-21.	1923 in p.c. of average.	1922.	1923.	Average 1917-21.	1923 in p.c. of average.
	000 acres.	000 acres.	000 acres.	p.c.	000 bush.	000 bush.	000 bush.	p.c.
Barley—concluded.								
Cyprus.....	117	113	115	98.2	2,352	2,543	2,514	101.1
India.....	7,356	7,401	7,269	101.8	145,973	145,460	141,549	102.8
Japan.....	2,746	2,549	2,912	87.6	87,139	73,445	92,073	79.8
Algeria.....	2,917	2,838	2,737	103.7	16,627	46,917	35,666	131.5
Egypt.....	375	401	385	104.0	11,306	11,989	11,189	107.1
French Morocco.....	2,548	2,803	2,246	124.8	27,230	35,371	32,805	107.8
Tunis.....	603	1,206	1,173	102.8	1,837	11,482	8,102	141.7
Argentina.....	600	638	625	102.0	7,658	12,056	3,282	367.3
Chile.....	153	145	123	118.0	5,051	5,866	4,050	144.8
Uruguay.....	3	5	5	97.9	28	79	76	103.9
New Zealand.....	18	22	21	77.6	623	643	1,007	63.9
Total.....	53,139	56,073	53,474	104.9	1,165,487	1,293,511	1,138,372	113.6
Oats—								
Germany.....	7,912	8,262	7,670	107.7	260,373	387,464	307,724	125.9
Austria.....	104	802	633	126.7	17,239	24,340	15,244	159.7
Belgium.....	717	654	583	112.1	33,679	44,288	30,256	146.4
Bulgaria.....	351	370	338	109.5	8,606	8,648	6,429	134.5
Denmark.....	1,119	1,122	1,023	109.6	54,968	59,393	43,249	137.3
Spain.....	1,514	1,595	1,533	104.0	29,378	38,056	31,970	119.0
Estonia.....	396	378	346	100.0	9,466	7,475	7,706	97.0
Serbo-Croat-Slovene State.....	966	928	1,016	91.3	17,197	20,213	19,364	104.4
Finland.....	1,061	1,056	1,038	102.0	34,988	20,036	24,932	80.4
France.....	8,492	8,457	7,999	105.7	271,310	317,128	224,531	141.2
England and Wales.....	2,157	1,976	2,405	82.2	82,485	89,139	105,346	84.6
Scotland.....	988	968	1,088	89.0	44,157	42,331	49,845	84.9
Northern Ireland.....	405	352	423	83.0	20,199	20,109	21,601	93.1
Irish Free State.....	814	786	991	79.3	37,767	33,086	53,588	61.7
Hungary.....	811	801	844	95.8	21,227	25,843	20,833	124.0
Italy.....	1,214	1,223	1,184	103.3	28,673	37,485	33,701	111.2
Latvia.....	681	754	622	121.4	17,102	15,447	15,852	97.4
Lithuania.....	769	816	704	115.9	27,240	21,437	14,962	143.3
Luxemburg.....	71	73	61	120.3	1,437	2,987	1,494	199.9
Norway.....	301	256	325	78.8	12,593	7,529	14,444	52.1
Netherlands.....	394	381	389	97.9	18,728	19,593	20,141	97.3
Poland.....	5,879	6,215	5,050	123.1	162,469	228,399	147,024	155.3
Portugal.....	482	526	511	102.9	11,924	8,680	4,798	180.9
Rumania.....	3,295	3,325	2,725	122.0	86,658	58,980	63,391	93.0
Sweden.....	1,799	1,795	1,802	99.6	74,310	69,809	63,641	109.7
Switzerland.....	51	51	64	79.0	2,321	2,879	3,448	83.5
Czecho-Slovakia.....	2,017	2,081	1,967	105.8	67,344	86,292	62,938	137.1
Canada.....	14,541	14,388	15,171	94.8	491,240	563,998	436,130	129.3
United States.....	40,790	40,833	42,776	95.5	1,144,283	1,223,360	1,272,732	96.1
Cyprus.....	15	14	15	92.6	249	328	286	114.5
Japan.....	307	266	197	135.2	12,646	12,646	8,475	121.8
Algeria.....	585	600	597	100.4	6,802	18,117	12,440	145.6
French Morocco.....	28	29	21	134.3	169	391	368	106.1
Tunis.....	112	121	152	79.5	746	2,594	3,197	81.1
Argentina.....	2,618	2,747	2,529	108.6	52,328	76,666	40,424	189.7
Chile.....	81	79	71	111.9	2,656	3,056	2,604	117.4
Uruguay.....	87	120	113	106.2	940	2,029	2,077	97.7
New Zealand.....	143	65	165	39.2	6,525	2,265	7,060	32.1
Total.....	104,666	105,276	105,141	100.1	3,172,422	3,602,517	3,194,248	112.8
Corn—								
Austria.....	148	144	106	136.0	3,477	3,450	2,255	153.0
Bulgaria.....	1,313	1,364	1,414	96.4	15,479	26,867	18,616	144.3
Spain.....	1,150	1,166	1,174	99.3	26,832	23,925	26,331	90.9
Serbo-Croat-Slovene State.....	4,722	4,452	4,666	97.5	89,798	84,782	87,463	96.9
France.....	790	845	796	106.2	12,676	12,673	11,924	106.3
Hungary.....	2,445	2,459	2,092	117.5	48,725	49,247	40,933	120.3
Italy.....	3,811	3,790	3,821	99.2	77,153	89,205	87,336	102.1
Poland.....	183	189	132	143.2	2,776	3,831	2,266	169.1
Lithuania.....	8,411	8,413	8,327	101.0	116,050	151,405	146,484	103.4
Switzerland.....	4	4	5	67.8	185	165	284	58.3
Czecho-Slovakia.....	392	398	377	105.5	9,885	10,621	9,540	111.3
Canada.....	318	318	267	118.8	13,798	13,608	13,029	99.8
United States.....	102,846	104,158	102,882	101.2	2,906,020	3,046,000	2,838,167	107.3
Guatemala.....	455	457	561	81.5	5,412	7,874	6,274	125.5
Philippines.....	1,359	1,378	1,166	118.2	14,651	18,030	14,451	124.8
Algeria.....	18	16	16	95.4	229	230	212	108.9

59.—Acreage and Production of Cereals and of Potatoes in Countries of the World, 1922 and 1923—concluded.

Countries.	1922.	1923.	Average 1917-21.	1923 in p.c. of average.	1922.	1923.	Average 1917-21.	1923 in p.c. of average.
	000 acres.	000 acres.	000 acres.	p.c.	000 bush.	000 bush.	000 bush.	p.c.
Corn—concluded.								
Egypt.....	2,027	1,865	1,863	100-1	73,505	73,711	65,128	113-2
French Morocco.....	535	668	534	125-0	4,564	4,805	4,463	107-7
Argentina.....	7,851	8,465	8,117	104-3	176,105	276,760	212,039	130-5
Chile.....	70	80	63	127-3	1,677	2,062	1,527	135-0
Uruguay.....	677	569	577	98-7	4,826	6,499	6,284	103-4
Java and Madura.....	3,887	4,028	4,182	96-3	45,604	49,890	53,424	93-4
South Rhodesia.....	220	230	181	126-8	5,179	2,964	3,204	92-5
New Zealand.....	10	9	10	87-8	506	460	435	105-7
Total.....	143,651	145,465	143,230	101-6	3,655,112	3,959,065	3,652,669	108-4
Potatoes—								
Germany.....	6,725	6,738	5,949	113-3	896,521	693,939	553,291	125-4
Austria.....	403	373	286	130-4	30,827	31,443	15,067	208-7
Belgium.....	445	377	391	96-4	86,673	62,219	51,676	120-4
Bulgaria.....	20	24	20	117-8	816	732	787	93-0
Denmark.....	204	204	200	101-9	20,550	27,298	26,528	102-9
Spain.....	783	757	800	94-6	65,159	57,298	62,415	91-8
Estonia.....	187	179	146	122-1	15,924	15,044	13,249	113-6
Serb-Croat-Slovene State..	532	527	510	103-3	18,660	25,583	20,179	126-8
Finland.....	167	168	190	88-4	11,578	9,480	11,538	82-2
France.....	3,619	3,586	3,485	102-9	278,800	218,670	209,131	104-6
England and Wales.....	561	467	544	85-8	89,869	61,734	73,436	84-1
Scotland.....	157	137	158	86-9	26,678	18,368	24,058	76-3
Northern Ireland.....	169	163	172	94-5	28,038	19,842	19,611	101-2
Irish Free State.....	401	391	455	86-0	48,822	32,408	47,212	68-6
Hungary.....	635	646	646	100-0	29,095	29,415	36,612	80-3
Italy.....	861	860	822	104-6	32,216	39,591	35,793	110-6
Latvia.....	171	194	146	133-1	14,884	12,752	14,855	85-8
Lithuania.....	326	353	304	116-1	40,742	35,940	25,803	139-3
Luxemburg.....	37	38	32	116-8	4,204	4,171	3,028	137-8
Malta.....	4	5	3	161-5	353	546	347	157-4
Norway.....	126	113	128	88-1	19,619	14,562	19,637	74-2
Netherlands.....	454	398	437	91-2	81,974	53,953	61,433	87-8
Poland.....	5,409	5,632	4,920	114-5	732,356	584,100	381,391	153-1
Rumania.....	355	430	325	132-3	22,615	40,753	20,883	195-2
Sweden.....	400	392	385	101-9	44,873	36,140	41,216	87-7
Switzerland.....	112	111	132	83-8	14,892	13,975	18,539	75-4
Czecho-Slovakia.....	1,607	1,573	1,534	102-5	199,942	137,222	102,865	133-4
Canada.....	684	561	730	75-9	55,745	55,497	66,119	83-9
United States.....	4,307	3,816	3,906	97-7	272,038	247,435	229,127	108-0
Guatemala.....	3	3	6	54-7	75	44	208	21-2
Cyprus.....	3	5	4	130-8	323	160	343	46-8
Algeria.....	47	47	40	115-8	1,552	717	1,223	58-6
Tunis.....	3	3	2	112-9	99	88	89	98-8
Argentina.....	361	402	352	114-3	19,948	21,164	20,742	102-0
Chile.....	80	87	77	113-0	6,792	7,786	6,300	123-6
New Zealand.....	20	21	22	96-3	2,550	2,338	2,641	88-5
Total.....	30,378	29,781	28,268	105-4	3,224,802	2,612,497	2,217,372	117-8

Average Yields per Acre.—Table 60 shows for the same countries as in Table 59 the average yields per acre of cereals and of potatoes for the year 1923, as compared with the average for the five years 1917-21 (1917-18 to 1921-22). For wheat (45 countries) the yield per acre is 15-9 bushels, as compared with 13-9, the average; for rye (29 countries) the yield is 20-3, as against 18; for barley (42 countries), 23-1 and 21-3; for oats (38 countries), 34-2 and 30-4; for corn (24 countries), 27-2 and 25-5; and for potatoes (36 countries), 87-7 cwt., as against 78-5 cwt. The highest averages by countries in 1923 are: for wheat, Denmark 43-2 bushels; for rye, Belgium 36-3; for barley, the Netherlands 50-1; for oats, Belgium 67-7; for corn, Canada 42-8; and for potatoes, Belgium 165-1 short cwt. In these comparisons the size of the country should be considered, as the smaller European countries are more intensively cultivated and the average yields per acre are larger in consequence.

60.—Average Yields per Acre of Cereals and of Potatoes in Countries of the World, 1917-21 and 1923.

Countries.	Wheat.		Rye.		Barley.	
	1923.	Average 1917-21.	1923.	Average 1917-21.	1923.	Average 1917-21.
	bush. per acre.	bush. per acre.	bush. per acre.	bush. per acre.	bush. per acre.	bush. per acre.
Germany.....	28.4	26.6	26.2	21.9	34.0	29.0
Austria.....	18.7	15.3	17.2	14.8	23.6	18.6
Belgium.....	38.7	35.6	36.3	33.6	49.4	48.8
Bulgaria.....	15.7	13.4	16.1	13.3	20.3	16.6
Denmark.....	43.2	43.9	26.4	23.1	47.1	38.9
Spain.....	14.9	13.4	15.6	14.9	24.6	20.3
Estonia.....	15.4	14.2	16.2	16.6	13.1	16.4
Serb-Croat-Slovene State.....	15.9	13.1	12.8	12.9	15.8	14.5
Finland.....	11.9	15.9	16.2	16.9	13.7	18.0
France.....	20.2	19.9	16.5	16.8	26.7	21.4
England and Wales.....	32.7	31.1	—	—	33.9	31.7
Scotland.....	39.5	39.4	—	—	36.5	37.3
Northern Ireland.....	32.6	33.6	—	—	44.8	38.3
Greece.....	12.5	10.3	12.3	14.2	17.8	18.0
Irish Free State.....	32.7	17.1	—	—	36.8	40.7
Hungary.....	20.4	16.4	19.3	15.5	24.0	17.6
Italy.....	19.5	15.0	20.6	17.9	18.5	17.0
Latvia.....	15.7	17.1	16.6	17.5	13.9	18.0
Lithuania.....	14.7	15.7	16.6	15.3	18.4	15.5
Luxemburg.....	18.7	18.2	20.5	18.7	23.4	19.1
Norway.....	22.9	24.7	27.3	27.6	26.3	33.2
Netherlands.....	39.8	37.5	27.6	29.6	50.1	46.9
Poland.....	19.8	17.8	20.5	18.3	25.7	22.3
Portugal.....	12.5	8.7	9.5	6.5	14.4	8.9
Rumania.....	15.4	12.7	14.4	11.7	13.1	15.4
Sweden.....	30.6	27.2	28.1	23.2	29.9	28.1
Switzerland.....	34.1	31.0	34.4	31.1	36.1	33.6
Czecho-Slovakia.....	24.0	20.8	25.1	19.7	32.4	25.5
Malta.....	28.2	24.7	—	—	42.2	28.9
Canada.....	21.0	12.8	16.0	13.8	27.8	23.0
United States.....	13.5	13.7	12.2	12.9	25.1	23.3
Guatemala.....	12.6	14.4	—	—	—	—
Mexico.....	7.2	5.6	—	—	—	—
Cyprus.....	13.7	13.8	—	—	22.5	21.8
British India.....	12.1	11.2	—	—	19.7	19.5
Japan.....	23.8	22.4	—	—	28.8	31.6
Philippines.....	—	—	—	—	—	—
Algeria.....	11.5	9.2	18.9	16.7	16.5	13.0
Egypt.....	26.5	25.2	—	—	29.9	29.1
French Morocco.....	8.9	10.2	—	—	12.6	14.6
Tunis.....	6.4	5.8	—	—	9.5	6.9
Argentina.....	14.3	11.9	13.9	3.9	18.9	5.3
Chile.....	19.1	17.6	18.7	18.2	40.3	32.9
Uruguay.....	12.6	10.9	—	—	17.2	16.2
Java and Madura.....	—	—	—	—	—	—
South Rhodesia.....	—	—	—	—	—	—
Australia.....	13.2	11.9	—	—	—	—
New Zealand.....	23.9	29.4	—	—	29.5	35.8
Total average.....	15.9	13.9	20.3	18.0	23.1	21.3

**60.—Average Yields per Acre of Cereals and of Potatoes in Countries
of the World, 1917-21 and 1923—concluded.**

Countries.	Oats.		Corn.		Potatoes.	
	1923.	Average 1917-21.	1923.	Average 1917-21.	1923.	Average 1917-21.
	bush. per acre.	bush. per acre.	bush. per acre.	bush. per acre.	cwt. per acre.	cwt. per acre.
Germany.....	46.9	40.1	—	—	103.0	93.0
Austria.....	30.4	24.1	23.9	21.2	84.3	52.7
Belgium.....	67.7	51.9	—	—	165.1	132.2
Bulgaria.....	23.4	19.0	19.7	13.2	31.1	39.5
Denmark.....	52.9	42.3	—	—	133.7	132.5
Spain.....	23.9	20.9	20.5	22.4	75.7	77.9
Estonia.....	19.8	22.2	—	—	84.2	90.6
Serb-Croat-Slovene State.....	21.8	19.1	19.0	19.2	48.6	39.6
Finland.....	18.9	24.0	—	—	56.4	60.7
France.....	37.5	28.1	14.9	15.0	61.0	60.0
England and Wales.....	45.1	43.8	—	—	132.3	135.0
Scotland.....	43.7	45.8	—	—	134.1	152.7
Northern Ireland.....	57.2	51.0	—	—	122.0	113.9
Greece.....	—	—	—	—	—	—
Irish Free State.....	42.1	54.1	—	—	82.8	103.8
Hungary.....	31.9	24.7	20.0	19.6	45.5	56.6
Italy.....	30.6	28.5	23.5	22.9	46.0	43.5
Latvia.....	20.5	25.5	—	—	65.8	102.1
Lithuania.....	26.3	21.3	—	—	101.7	84.8
Luxemburg.....	40.9	24.6	—	—	110.9	94.0
Norway.....	29.4	44.5	—	—	128.9	153.3
Netherlands.....	51.5	51.8	—	—	135.5	140.7
Poland.....	36.7	29.1	20.3	17.2	103.7	77.5
Portugal.....	16.5	9.4	—	—	—	—
Rumania.....	17.7	23.3	18.0	17.6	94.9	64.2
Sweden.....	38.9	35.3	—	—	92.2	107.1
Switzerland.....	56.6	53.5	41.3	48.1	126.5	140.6
Czecho-Slovakia.....	41.5	32.0	26.7	25.3	87.2	67.1
Malta.....	—	—	—	—	113.8	115.7
Canada.....	39.3	28.8	42.8	51.0	99.0	89.4
United States.....	29.9	29.8	29.2	27.6	64.8	58.7
Guatemala.....	—	—	17.2	11.2	14.7	37.8
Mexico.....	—	—	—	—	—	—
Cyprus.....	23.1	18.7	—	—	29.7	83.5
British India.....	—	—	—	—	—	—
Japan.....	47.5	43.0	—	—	—	—
Philippines.....	—	—	13.1	12.4	—	—
Algeria.....	30.2	20.8	14.7	12.9	15.4	30.5
Egypt.....	—	—	39.5	35.0	—	—
French Morocco.....	13.6	17.2	7.2	8.4	—	—
Tunis.....	21.4	21.0	—	—	35.3	40.6
Argentina.....	27.9	16.0	32.7	26.1	52.6	58.9
Chile.....	38.7	36.9	25.7	24.2	89.6	81.9
Uruguay.....	16.9	18.3	11.4	10.9	—	—
Java and Madura.....	—	—	12.4	12.8	—	—
South Rhodesia.....	—	—	12.9	17.7	—	—
Australia.....	—	—	—	—	—	—
New Zealand.....	34.9	42.7	53.5	44.4	111.9	121.7
Total average.....	34.2	30.4	27.2	25.5	87.7	78.5

13.—Appendix: The Field Crops of 1924.

(From the Monthly Bulletin of Agricultural Statistics for January, 1925).

Season of 1923-24.—For the second year in succession, the spring opened up late, and seeding in the Prairie Provinces was greatly delayed, especially in Manitoba, where, as a consequence, the area sown to wheat was less than in 1923 by more than 456,000 acres. In this province, however, the harvest returns were on the whole excellent, and were in marked contrast with those of 1923, when the crops suffered severely from rust. In Saskatchewan and Alberta the prevalence of drought reduced the yields, which were not only greatly inferior to those of 1924 but were also considerably below average. Bad weather during the threshing season had the effect of reducing the quality of the grain, which did not therefore grade so well as in 1923. On the other hand, the recovery in the prices of grain from the low levels to which they had sunk in 1923 came as a welcome offset to the lower yields.

Areas and Yields of Grain Crops.—The total yield of wheat in Canada for 1924 is now finally estimated at 262,097,000 bushels from 22,055,710 acres, as compared with 474,199,000 bushels from 21,886,146 acres in 1923, and with 326,258,640 bushels from 21,142,824 acres, the annual average for the five years 1919-23. The total for 1924 consists of 22,294,000 bushels from 774,172 harvested acres of fall wheat, and of 239,803,000 bushels from 21,281,538 acres of spring wheat. The average yield per acre for all wheat in 1924 is 11.9 bushels, as compared with 21.7 bushels in 1923, and with 15.4 bushels, the annual average for the five years 1919-23. For fall wheat the average yield per acre in 1924 is 28.8 bushels, as against 23.75 bushels in 1923 and 22.8 bushels, the five-year average. For spring wheat the average for 1924 is 11.3 bushels, as compared with 21.6 bushels in 1923 and with 15.1 bushels, the five-year average. Oats yielded in 1924 the total of 411,697,000 bushels from 14,491,289 acres, as compared with 563,997,500 bushels from 14,387,807 acres in 1923, and with 481,313,220 bushels from 15,336,021 acres, the five-year average. The average yield per acre is 28.4 bushels, as against 39.25 bushels in 1923, and 31.4 bushels, the five-year average. Barley yielded 86,753,000 bushels from 3,407,441 acres, as compared with 76,997,800 bushels from 2,784,571 acres in 1923 and with 65,654,430 bushels from 2,675,437 acres, the five-year average. The average yields per acre were 25.5 bushels in 1924, 27.75 bushels in 1923 and 24.5 bushels, the five-year average. Flaxseed gave the total of 6,694,700 bushels from 1,276,667 acres in 1924, as compared with 7,139,500 bushels from 629,938 acres in 1923, and with 5,946,060 bushels from 849,968 acres, the five-year average. The yield per acre was 7.6 bushels for 1924, as against 11.30 bushels in 1923 and 7 bushels, the five-year average. For the remaining cereal crops the total yields for 1924 were, in bushels, as follows, the corresponding totals for 1923 and for the five-year average being shown within parentheses: rye, 14,212,900 (23,231,800, 19,714,852); peas 3,239,900 (2,898,200, 3,154,536); beans, 1,194,100 (1,641,706, 1,217,760); buckwheat, 11,412,000 (9,743,700, 9,440,100); mixed grains, 31,995,000 (29,750,500, 28,000,420); and corn for husking, 11,998,000 (13,608,000, 14,717,060).

Root and Fodder Crops.—The total yield of potatoes in 1924 is estimated at 56,648,000 cwt. from 561,628 acres, as compared with 55,497,000 cwt. from 560,942 acres in 1923, and with 66,258,736 cwt. from 709,952 acres, the five-year average, 1919-23. The average yield per acre in 1924 is 100.9 cwt. as compared with 99 cwt. in 1923 and with 93.3 cwt., the five-year average. Turnips, mangolds, etc., gave 40,597,000 cwt. from 197,920 acres, as against 38,116,500 cwt. from 194,512 acres in 1923, and with 47,200,980 cwt. from 250,805 acres, the five-year average. The yield per acre is 205.1 cwt., as compared with 196 cwt. in 1923 and with 188.2 cwt., the five-year average. Sugar beets produced 334,000 tons from 36,080 acres

in 1924, as against 216,200 tons from 22,450 acres in 1923 and 265,400 tons from 26,466 acres, the five-year average. The yield per acre was 9.28 tons in 1924, 9.60 tons in 1923 and 10.03 tons, the five-year average. The total yield of hay and clover in 1924 was 14,960,300 tons from 9,874,907 acres, as compared with 14,844,900 tons from 9,725,602 acres in 1923, and with 14,777,180 tons from 10,263,379 acres, the average. The yields per acre were 1.51 tons in 1924, 1.55 tons in 1923 and 1.37 tons, the average. Grain hay is estimated to have yielded, in 1924, 4,983,000 tons from 2,486,899 acres, an average yield per acre of 2 tons. Alfalfa yielded 1,256,800 tons from 473,507 acres in 1924, 1,028,600 tons from 391,116 acres in 1923 and 715,038 tons from 285,273 acres, the average. The yield per acre was 2.65 tons in 1924, the same as in 1923; the five-year average was 2.50 tons. Fodder corn yielded 5,740,700 tons from 718,879 acres in 1924, 5,320,800 tons from 659,070 acres in 1923, and 5,629,182 tons from 599,967 acres, the five-year average. The yields per acre were 7.99 tons in 1924, 8.10 tons in 1923 and 9.38 tons, the five-year average.

Grain Yields of the Prairie Provinces.—The total grain yields of the three Prairie Provinces (Manitoba, Saskatchewan and Alberta) are finally estimated as follows: wheat, 235,694,000 bushels from 21,066,221 acres (452,260,000 bushels, 20,879,558 acres in 1923); oats, 229,046,000 bushels from 9,199,426 acres (391,756,000 bushels, 9,032,821 acres in 1923); barley, 68,576,000 bushels from 2,820,545 acres (59,778,200 bushels, 2,180,472 acres in 1923); rye, 11,588,000 bushels from 743,039 acres (20,842,000 bushels, 1,303,210 acres in 1923); flaxseed, 9,577,900 bushels from 1,265,895 acres (7,044,800 bushels, 620,172 acres in 1923).

Values of Field Crops.—The average prices per unit received by farmers in 1924 are estimated from the reports of crop correspondents as follows: the corresponding prices for 1923 and for the five-year average 1919-23 are given within parentheses: per bushel; fall wheat, \$1.27 (92 cents, \$1.44); spring wheat, \$1.22 (66 cents, \$1.07); all wheat, \$1.22 (67 cents, \$1.09); oats, 49 cents (33, 46); barley, 70 cents (42, 66); rye, 99 cents (49, 76); peas, \$1.75 (\$1.72, \$2.19); beans, \$2.77 (\$2.66, \$3.41); buckwheat, 89 cents (84, \$1.08); mixed grains, 71 cents (59, 82); flaxseed, \$1.94 (\$1.77, \$2.20); corn for husking, \$1.19 (92 cents, \$1.02): per cwt.; potatoes, 85 cents (\$1.02, \$1.32); turnips, etc., 44 cents (59, 75): per ton; hay and clover, \$11.07 (\$10.97, \$18.65); alfalfa, \$11.70 (\$11.58, \$16.81); grain hay, \$9.25 (\$3.47 in 1923); fodder corn, \$5.03 (\$4.62, \$6.27); sugar beets, \$6.79 (\$6.48, \$9.44).

The total values of field crops are estimated as follows, the corresponding values for 1923 and for the five-year average, 1919-23, being given within parentheses: wheat, \$320,362,000 (\$316,934,700, \$356,873,800); oats, \$203,034,000 (\$184,857,400, \$222,784,020); barley, \$60,509,000 (\$32,570,700, \$43,262,370); rye, \$14,137,700 (\$11,339,900, \$14,953,610); peas, \$5,676,000 (\$4,987,400, \$6,903,720); beans, \$3,306,900 (\$2,773,000, \$4,155,100); buckwheat, \$10,149,000 (\$8,191,700, \$10,192,220); mixed grains, \$22,626,000 (\$17,654,800, \$23,013,664); flaxseed, \$18,849,300 (\$12,643,900, \$13,066,580); corn for husking, \$14,227,000 (\$12,466,000, \$14,993,220); potatoes, \$17,956,000 (\$56,397,800, \$87,512,580); turnips, mangolds, etc., \$17,884,000 (\$22,483,100, \$35,232,180); hay and clover, \$165,587,000 (\$162,882,000, \$262,495,120); alfalfa, \$14,705,000 (\$11,914,000, \$12,021,580); fodder corn, \$28,848,000 (\$24,605,000, \$35,312,780); sugar beets, \$2,268,000 (\$1,401,000, \$2,505,540); grain hay, \$16,133,000 (\$15,063,800). The aggregate value of all field crops in 1924 is \$996,257,900, compared with \$899,166,200 for 1923, an increase of \$97,091,700, caused mainly by the higher prices per bushel for grain on smaller yields, and also to a large extent by the increased value of grain hay in Alberta, which for 1924 is placed at \$13,695,000, as compared with \$12,562,000 in 1923.

III.—FORESTRY.

1.—Physiography, Geology and Climate from a Forestry Viewpoint.

The Dominion of Canada may be roughly divided into three main drainage areas: the Pacific slope west of the Rocky mountains, the Great Plains region draining into the Arctic and Hudson bay, and the basin of the Great Lakes and the St. Lawrence together with the Maritime Provinces. These three regions support three distinct types of forest growth.

The Pacific Slope.—The Pacific slope is characterized by numerous systems of mountains running approximately parallel and extending from the southeast to the northwest. The Rocky mountains vary in elevation from 5,000 to 10,000 feet above sea level, with individual peaks extending well above 10,000 feet. Between this system and the Pacific are the Selkirk, Caribou and Coast mountains and lesser ranges, terminating with the sunken range whose upper elevations form Vancouver island, the Queen Charlotte group and other coast islands. The chief rivers follow the valleys between these ranges, breaking through in some cases along the shorter cross valleys from east to west.

The Rocky mountains are formed chiefly of Palæozoic rocks, as are also the islands on the coast. The Coast range is almost entirely granitic and the Selkirks Pre-Cambrian or Cambrian. The intervening ranges are of mixed formations varying from rocks of sedimentary origin to granites. The best soil in British Columbia is concentrated in valley bottoms or alluvial deltas, and the purely agricultural area has been estimated at 20,700 square miles or about 6 p.c. of the land area.

The climate along the coast is mild and humid, with a mean annual temperature varying from 44° to 49° F. The precipitation is the heaviest in Canada, varying from 40 to 120 inches. The greater part of this precipitation falls during autumn and winter, however, only 30 p.c. falling during the growing season, to which fact is sometimes ascribed the scarcity of deciduous-leaved forest growth which requires more moisture during the growing season. In any case, coniferous tree growth in this region is the most luxuriant in Canada, and the forests have the most rapid rate of growth, the largest individual trees and the heaviest stands of timber in Canada, extending from sea level up to elevations of 3,500 or 4,000 feet. The Interior Dry belt of British Columbia has a low annual precipitation, varying from 10 to 20 inches. Extremes of temperature from 100° F. to —45° F. make this a region unfavourable to tree growth. The winds from the Pacific which precipitate most of their moisture on the Coast range cross this interior plateau and give up a large part of what remains when they reach the Selkirk and Rocky ranges, forming what may be termed the Interior Wet belt, centered in the Columbia valley. Here the precipitation varies from 30 to 60 inches, taking the form of snow in higher altitudes. Temperatures vary from 100° F. to —17° F. In the Rocky Mountain range itself the climate is more extreme and variable than to the westward.

The Great Plains.—East of the Rockies lies the Great Plains region, composed of a variety of topographical types. From the foothills of the Rockies, the country slopes gradually eastward and northward. The prairie country extends from the international boundary to the 55th parallel along the foothills, gradually tapering down toward the east to a point near the lake of the Woods. This area is now almost entirely treeless, with rich fertile soil, and is at present a purely agricultural or pastoral country. Whether its present treeless condition is due to

climatic or other causes is problematical, but the presence of isolated patches of tree growth in situations well protected from fires would seem to indicate that repeated burning accounts, at least in part, for its present treeless state. The underlying rocks are of the Tertiary and Mesozoic ages. The climate of Alberta is extremely variable in winter, due to a warm, dry wind known as the "Chinook" which blows from the south and southwest and extends its influence from the international boundary to the Peace river and eastward to Regina in Saskatchewan. In summer the isotherms run almost due north and south in Alberta. Rainfall varies from 15 to 20 inches. The temperature in Manitoba has an absolute recorded range of 150° F., with a mean range of 71°. Saskatchewan and Alberta are more temperate, especially where they are affected by the "Chinook." North of the treeless prairies is a region, largely unexplored, covered at first by a comparatively light forest growth which toward the north and east gives way to the sub-Arctic "tundra"—a region of muskeg and bare, glacier-worn rocks of the Laurentian and Pre-Cambrian types.

These Laurentian rocks in Canada form the Archæan or Canadian Shield, with a distinct type of topography. This rock formation covers a huge irregular triangle with its apex near the Thousand islands in the St. Lawrence, from which point one arm extends northwesterly to the mouth of the Mackenzie river and the other northeasterly down the St. Lawrence valley to include the Labrador peninsula. This entire region has been reduced to a peneplain condition by repeated glacial action which has worn down the high elevations and scoured out most of the soil except in isolated depressions. It is covered with innumerable lakes, muskegs or bogs and rivers. The climate in the northern portion is as a rule too severe for continuous successful agriculture, but this region is covered by a comparatively light forest growth gradually thinning out toward the north and toward Hudson bay and James bay to the "tundra" type referred to. The southern portion of the shield is to a great extent agricultural land, actual or potential, much of it being still heavily forested.

The St. Lawrence and Atlantic Slope.—The basin of the St. Lawrence and the Great Lakes contains a variety of topographical and geological types. The north shores of lake Superior and Georgian bay, the upper Ottawa River valley and the southern part of Labrador are part of the Laurentian Shield already described. Here the climate is tempered in part by the presence of the lakes and the gulf of St. Lawrence, but is nevertheless severe and variable. To the south, soil and climate improve, and the southwestern peninsula of Ontario, the north shore of lake Ontario and the St. Lawrence valley are all essentially agricultural land. The rock is of sedimentary origin of the Palæozoic age.

The Maritime Provinces, with a general slope toward the Atlantic, are varied in topography and geology. The climate resembles that of southern Ontario, being modified by the presence of the ocean. Precipitation is above 35 inches annually. This region supports a type of forest similar to that of the southern portion of the Archæan Shield.

2.—Main Types of Forest Growth.

Physiographic, climatic and soil conditions in Canada generally seem to favour the coniferous type of forest. While the more fertile portions of Ontario, Quebec and the Maritime Provinces supported a heavy virgin growth of hardwoods, the greater part of Canada's forest area is covered with spruce, pine, balsam, Douglas fir and other coniferous softwoods. Three main groups of forest growth in Canada follow the main physiographic divisions already mentioned. These groups are the Cordilleran, the Great Plains and the Eastern forests.

The Cordilleran Forest.—The Cordilleran forest, which covers the greater part of the Pacific slope, may be sub-divided into the Coast belt, the Interior Dry belt, the Interior Wet belt and the Rocky Mountain belt. The Coast belt includes several distinct forest types, their character being determined by variations in climatic and topographic conditions, among which altitude and precipitation have had the greatest effect on forest growth. Douglas fir and red cedar are the principal species in the southern portion of the belt at altitudes up to 2,000 or 2,500 feet. With these are associated hemlock, white pine, amabilis and lowland fir. Toward the north and at higher altitudes, Douglas fir disappears and red cedar and hemlock are the important trees, with amabilis fir and yellow cypress as subsidiaries. In the Queen Charlotte islands and along the coast of the mainland opposite, Sitka spruce and western hemlock form a lowland type.

Western yellow or "bull" pine predominates at low altitudes, bordering on the grass lands in the Interior Dry belt. Douglas fir gradually increases in importance until it predominates at elevations up to 3,500 and 4,500 feet. Western larch covers a limited area between the true yellow pine and Douglas fir types. At the northern latitudinal and upper altitudinal limits of the Douglas fir type, an Engelmann spruce type develops which merges into a spruce-alpine fir type at still higher altitudes. Lodgepole pine has taken the place of Douglas fir, Engelmann spruce, and, in some cases, yellow pine on burned-over areas, and has become to a considerable extent established as a distinct type.

Forest types similar to those of the coast have developed in the Interior Wet belt. In the southern portion of this belt, red cedar predominates in the wetter situations, mixed with Douglas fir, Engelmann spruce, white pine, hemlock, western larch, alpine fir, lowland fir and cottonwood. On the benches and lower valley slopes, hemlock and cedar are the important species. Engelmann spruce replaces hemlock at higher elevations, cedar gradually disappears and the spruce-alpine fir type stretches up to timber line. To the north, Engelmann spruce and alpine fir are more prominent, and the other species are gradually eliminated.

The Rocky Mountain belt includes portions of the Dry belt types to the south and those of the Interior Wet belt further north. Otherwise the typical forest of the Rocky mountains is made up of Engelmann spruce, and some white spruce with an increasing proportion of alpine fir as the altitude increases. This type has suffered so severely from fire, especially on the dry eastern slopes, that lodgepole pine has established itself permanently in some cases and temporarily in others on burned-over areas.

Most of the commercially important species of the Cordilleran region are confined to British Columbia. The spruce-fir-lodgepole pine type of the northern interior extends across the Rockies into the foot-hills of Alberta. Certain species, such as Douglas fir, Engelmann spruce, lowland and alpine fir and lodgepole pine, are also found in western Alberta, but in few cases do they extend any great distance eastward.

The Forests of the Great Plains.—The Great Plains region may be divided into the Prairie, Northern Forest and Sub-Arctic belts. There are no great variations in altitude in the region, and soil conditions and latitude determine the distribution of forest types. The Prairie belt in southern Alberta, Saskatchewan and Manitoba extends north from the international boundary for 200 to 400 miles. Patches of tree growth in protected situations are made up chiefly of aspen poplar, with some white spruce and jack pine. North of this purely agricultural and pastoral area is the great Northern Forest belt, from 300 to 400 miles wide, which extends from

Alaska to Labrador, covering the northern part of the Laurentian Shield as far as the limits of commercial tree growth. Originally, white spruce predominated over this entire belt and it still forms the most important type commercially, although it has suffered severely through forest fires. In the east, balsam fir is an important associate and the spruce-balsam fir type makes up most of the pulpwood resources of eastern Canada. The black spruce-eastern larch (tamarack) type occupies poorly drained areas within this belt. Enormous areas have been burned over by forest fires. Aspen poplar has replaced the spruce and balsam on the best soil in these areas, and is now the most prevalent species, although this condition may not be permanent. Jack pine has taken possession of the dryer, lighter soils, in some cases permanently. Paper birch comes in with aspen poplar toward the east, and balsam poplar occurs in the moister situations. Jack pine, aspen and balsam poplar reach a higher development along the Peace river in northern Alberta than they do elsewhere in America. Along its northern margin this belt merges into the sub-Arctic "tundra," with tree growth confined to narrow strips along waterways. To the northward, balsam fir disappears early from the forest growth, followed by balsam poplar, jack pine, aspen and paper birch, leaving white spruce, black spruce, tamarack or larch, and willow to define the northern limit of tree growth. This may be roughly indicated by a line drawn from the mouth of the Mackenzie river on the Arctic ocean to the mouth of the Churchill river on Hudson bay and across the Labrador peninsula at about 58° N. latitude.

The Eastern Forests.—In southeastern Canada a number of belts of forest growth with distinctive characteristics are recognized. The hardwood belts include the Carolinian zone, confined to the north shore of lake Erie and the western part of lake Ontario. This is important only as forming the northern fringe of a type which covers a large area in the Central Eastern United States, and includes a number of species not found elsewhere in Canada. North of this zone, still in the purely agricultural and pastoral area, the original forests were of the commercially important hardwoods, such as maple, elm, basswood, oak, yellow birch, hickory and beech, with patches of pine, hemlock and other conifers on the lighter soils. This area has been largely cleared and devoted to agriculture and the original forest type is to be seen only on farmers' wood lots.

Since the beginning of the lumbering industry in Canada, the region north of this belt, extending, roughly speaking, to the height of land between the St. Lawrence and Hudson bay waters, has been the centre of the most extensive exploitation, and still occupies that position as far as eastern Canada is concerned. The forest types which still exist in this region vary considerably owing to soil and other conditions, but generally speaking white pine occupies the better situations on the lighter soils, and reaches its highest development in this belt. With it is frequently associated the red or Norway pine. On heavier soils, spruce, hemlock and the commercial hardwoods occupy a minor position. Cedar, tamarack and black spruce form typical stands in poorly drained situations. Hardwood ridges, carrying chiefly maple and yellow birch, occur throughout this belt. The extensive lumbering operations of the past century, together with repeated forest fires, have greatly modified these original types. The exclusive cutting of white and red pine, practised until recently, has resulted in the displacement of these species by spruce, balsam fir, jack pine and the hardwoods, the spruce-balsam fir pulpwood areas being the most valuable type remaining. Jack pine has come in extensively on burned-over areas on lighter soils, and aspen and paper birch are being rapidly established as a temporary type. Along its northern border, this mixed hardwood

and softwood type merges into the Northern Forest belt already described, with the disappearance of the white and red pines, hemlock and the commercial hardwoods.

The Acadian belt covers the Maritime provinces and the south shore of the St. Lawrence in Quebec. The forest is similar to that of the New England states, being characterized by red spruce. With this are found varying proportions of white spruce and balsam fir. In the mixed softwood and hardwood type, which also occurs in this belt, white pine and hemlock occur, with yellow birch, maple and beech representing the commercial hardwoods. Cedar is fairly abundant in the western portion of this region. Burned-over areas in the Acadian belt are chiefly occupied temporarily by aspen and white birch.

3.—Important Tree Species.

In Canada there are approximately 160 different species and varieties of plants reaching tree size. Only thirty-one of these are coniferous, but the wood of these forms 80 p.c. of our standing timber and 95 p.c. of our sawn lumber. While the actual number of species of deciduous-leaved trees seems large in comparison to their commercial importance, out of a total of some ninety species and varieties, only four or five are worthy of comparison with the conifers.

Spruce.—The five native spruce species are all of commercial importance, furnishing nearly one-third of the total production of lumber. Spruce pulpwood is used in preference to all others, and forms over two-thirds of the total quantity of pulpwood consumed in Canadian pulp-mills and exported in the raw or unmanufactured state. The wood has a long, tough, colourless fibre, and, on account of its freedom from resin, is considered in the markets of the world to be the best material for pulp manufacture. Spruce is also used for railway ties, poles, cooperage and mining timbers. Of the five native spruce species, the white spruce (*Picea canadensis*) is the most abundant and the most important commercially. With black spruce (*Picea mariana*) it ranges from Labrador to Alaska, extending northward almost to the limit of tree-growth and southward into the United States. The black spruce (*Picea mariana*) is of less value, as it is a smaller, slow-growing tree, often confined to swampy situations and reaching sawlog sizes only under more favourable conditions of growth. The red spruce (*Picea rubra*) is confined to the province of Quebec and the Maritime Provinces. Its wood is considered to be of greater technical value than that of the other spruce species. The western species, Englemann and Sitka spruce (*Picea Engelmanni* and *Picea sitchensis*), are confined to the interior and coastal regions of British Columbia respectively. Their wood is of high technical value, and can usually be obtained in larger dimensions than that of the other spruces, as the trees attain great size in this region.

Pine.—There are nine distinct pine species native to Canada, of which six are of great commercial importance. Eastern white pine (*Pinus strobus*) is the most valuable coniferous wood in Canada. Up to a few years ago, it was the most important wood in Canada in point of quantity of lumber sawn and square timber (Quebec pine) exported. Owing to increased scarcity of good material, the wood has fallen off in production till its place at the head of the list has been taken by the spruces and Douglas fir. The wood of the white pine is soft, easy to work, fairly durable and strong in comparison to its weight. In addition to these properties, its most valuable quality is that of holding its shape with a minimum of shrinkage or swelling. The western white pine (*Pinus monticola*) is similar in most respects

to the eastern species. It does not form extensive pure stands, seldom comprising more than 5 p.c. of the trees on any area of considerable size. It is confined to the province of British Columbia, while the eastern white pine is found from eastern Manitoba to the Atlantic seaboard.

The wood of the red or Norway pine of eastern Canada (*Pinus resinosa*) is harder and more resinous than white pine, and the tree is a valuable source of structural timber, as well as of sawn lumber. The wood of the western yellow or "bull" pine of the interior of British Columbia (*Pinus ponderosa*) is softer and lighter in colour than red pine, and is now used extensively as a substitute for white pine. The two jack pines (*Pinus Banksiana* of the east and north, and the lodgepole pine, *Pinus Murrayana*, of the Rocky mountains and British Columbia) are not considered as valuable lumber-producing trees, although they are both used locally for rough construction. Jack pine railway ties are used to an enormous extent, chiefly on account of the strength, cheapness, and abundance of the wood. Jack pine has a well-established use in the manufacture of kraft pulp, and its use in the manufacture of pulp for newsprint is now being developed. There are three other species of the genus *Pinus* that reach tree size in Canada, but these are only of local importance.

Douglas Fir.—The Douglas fir (*Pseudotsuga taxifolia*) of British Columbia and the Pacific coast, often erroneously called "Oregon pine," is the only representative of its genus in Canada. It probably yields more lumber annually than any other single species in America. The tree in Canada is not found east of the Rocky mountains, the greater part of the lumber being produced in the Coast region of British Columbia. This is Canada's largest tree, and from it larger structural timbers can be obtained than from any other tree in America. It is used chiefly for structural purposes, but on account of its attractive appearance it is also used extensively for interior finish. The wood is also important in Canada as a material for railway ties and mining timbers. It is noted chiefly for its strength and durability, and the large dimensions in which it can be obtained.

Hemlock.—There are three hemlock species in Canada's forests, two of which are valuable timber trees. The eastern hemlock (*Tsuga canadensis*) is abundant throughout its range in the eastern provinces, but is not found west of the province of Ontario. The wood is used chiefly for construction, especially in house-framing. It supplies the demand for a cheap, strong material for many purposes, including railway ties, poles, mining timber, pulpwood and firewood, and its bark is a valuable source of tannin. The western hemlock (*Tsuga heterophylla*) is found in Canada only in the province of British Columbia, and is becoming more valuable each year as its qualities are better appreciated. The western species is used more extensively than the eastern in pulp manufacture.

Balsam Fir.—There is only one balsam fir in northern and eastern Canada (*Abies balsamea*), which is found from Labrador almost to Alaska. Its wood is sawn into lumber only to take the place of more valuable woods for rough construction, as it has few technical qualities which would recommend it for any other use as lumber. The purpose for which the wood is best suited is the manufacture of wood pulp for paper-making. The tree occurs in the forest mixed with spruce and it is cut and marketed with that wood. Balsam fir has the requisite length and toughness of fibre for pulp-making, and, in spite of the fact that it gives a slightly lower yield of pulp per cord and contains a higher percentage of resin than spruce, its use is increasing.

There are three western balsam fir species, the wood of which is very similar to that of the eastern tree. The most important of these for lumber at present is probably the Alpine fir (*Abies lasiocarpa*), although the two coastal species, lowland and amabilis fir, are used for pulp. Where the wood of these western species is utilized, it is put to uses similar to those of the eastern species. These western balsams are confined to the Rocky mountains and the Pacific slope.

Cedar.—There are only two species of the genus *Thuja*, commonly called "cedar", in Canada. They are both of great commercial importance, each in its own region, as their ranges do not overlap. The wood of the cedars is the most durable coniferous wood grown in the Dominion. The eastern tree, white cedar (*Thuja occidentalis*), is found from the Atlantic to the southeastern part of Manitoba. It does not extend as far north as some of the other conifers and is nowhere very plentiful, being confined to moist situations. Cedar is preferred to all other native woods for shingles and for all structural work exposed to moisture. In spite of the fact that the wood is not strong, its great durability in contact with the soil makes it a valuable railway tie material. It is used in enormous quantities both locally and for export, for poles and fence-posts, and its use for this latter purpose is largely responsible for the increased scarcity of the lumber, as young trees are used before they have time to reach sawlog sizes. The western red cedar (*Thuja plicata*) is one of the giants of the Pacific coast, being surpassed in size only by Douglas fir. Its wood is made into shingles to a greater extent than any other wood in Canada, and is also sawn into lumber.

Tamarack or Larch.—Of the three native tamarack or larch species, two are worthy of note. The eastern tamarack (*Larix laricina*) is found in every province in the Dominion in swampy situations. Its wood is hard, strong, and durable, being similar to that of Douglas fir and the southern hard pines. The western larch (*Larix occidentalis*) is more important. It is found only in the southern interior of British Columbia, but grows on better sites and reaches greater size than the eastern tree. The wood of these two species is cut into lumber and also used for railway ties and mining timbers.

Birch.—Birch is Canada's most important hardwood, and one of the few woods of this class where the exported material exceeds that imported. There are at least seven native species, but only two are worthy of any detailed discussion. The yellow birch (*Betula lutea*) is the source of the most valuable birch lumber, used for flooring, furniture, cabinet work and vehicle stock. The tree grows only in Ontario, Quebec and the Maritime Provinces, and does not reach commercial dimensions north of the height of land between the St. Lawrence river and Hudson bay. Its wood is hard, heavy, strong and tough, but is not durable in contact with moisture.

The paper birch (*Betula alba*, var. *papyrifera*) has a much wider distribution, being common from the Atlantic to the Rocky mountains, and is more abundant throughout its range than the yellow birch. Its wood is softer, weaker and less durable, and is not at present of great commercial value, except for spoolwood and certain similar classes of turnery. The tough, resinous bark of this tree has supplied the aborigines for centuries with the material for covering their famous birch-bark canoes.

Maple.—The maple, whose leaf is the national emblem of Canada, is our second most important hardwood, and is represented in Canada by nine or more species scattered from the Atlantic to the Pacific. Only one species, however, can be considered here. The sugar maple, or hard maple (*Acer saccharum*) produces

the most valuable lumber and, like birch, is used for furniture, vehicle stock, and interior house finishing. The sap of this tree is the principal source of the maple syrup and sugar of commerce.

Basswood.—Basswood (*Tilia americana*) is a valuable wood for cabinet work of all kinds, but being restricted in distribution to the southern part of eastern Canada and in great demand, the available supply is rapidly disappearing.

Minor Species.—Elm, represented by three species in Canada, is a valuable vehicle wood. Beech, ash, oak, butternut, chestnut, hickory, cherry, black walnut, tulip, black gum, red alder, sycamore and sassafras are all valuable woods and are still sawn into lumber in Canada, but in many cases the supply, which was never large, has dwindled almost to insignificance.

The poplar species (*Populus sp.*), of which there are seven native to Canada, like paper birch and jack pine, produces great quantities of material which will eventually become valuable, when its qualities are better appreciated and when the scarcity of the more valuable of the better understood woods will make its careful utilization imperative.

4.—Forest Resources.

The total land area of Canada is approximately 3,600,000 square miles. Land suitable for agriculture, including pastoral land, has been estimated at 559,628 square miles, of which about 90,000 square miles are at present devoted to field crops. The area covered by existing forests covers approximately 1,200,000 square miles, some of which is agricultural land. Less than 40 p.c. of this carries merchantable timber (6 inches in diameter), and only about 20 p.c. carries saw timber (10 inches in diameter). The balance of the forested area carries young stands which have come up after fire or cutting. On a considerable proportion of this area the succeeding stands are inferior to the original forests. Under present conditions about a quarter of the timber of commercial size is commercially inaccessible, so that the forests on about two-thirds of our forest area are either too small or too expensive to be operated profitably. This is not a permanent condition, since accessibility depends primarily on market standards, current prices and transportation facilities, and all these factors are tending to increase the extent to which standing timber can be utilized. Young stands, as they reach maturity, also increase the area of accessible timber, and areas of farm land unsuitable for agriculture are eventually abandoned and revert to forest.

On the other hand, forest fires, windfall, insect and fungous damage and commercial operations tend to reduce the area. Certain forest areas are cleared and devoted to agriculture. Only when systematic land classification has been completed can the total area of absolute forest land be determined, *i.e.*, land capable of forest production but not suitable for agriculture.

About 245,000 square miles of forest land in Canada have been set aside in forest reserves or parks or otherwise permanently dedicated to forest production. Dominion reserves and parks cover about 45,000 square miles in Manitoba, Saskatchewan, Alberta and the area under Dominion control in British Columbia. The other provincial areas in square miles are as follows:—Quebec, 174,000; Ontario, 23,000; British Columbia, 3,000.

For a large proportion of the present forest area of Canada, there is little reliable information. Comprehensive forest surveys have been made only for the provinces of Nova Scotia and British Columbia. Reports of these surveys were

published by the Commission of Conservation. A survey of conditions in Ontario, commenced by that Commission, is now being completed by the Dominion Forestry Branch in co-operation with the Provincial Forest Service. Extensive areas in the three Prairie Provinces have been examined by the Dominion Service, but the extent of their total resources is still undetermined. The New Brunswick Provincial Service has examined 60 p.c. of that province's Crown timber lands and the Forest Service of Quebec is also collecting data as to the forests under its control.

The estimates given here for both area and quantity are based on data insufficient for accuracy; they must be accepted as being subject to revision as more complete information becomes available.

Table 1 gives a rough distribution of these quantities and indicates that the greater part of the saw material in the Dominion is to be found in British Columbia, but that over 44 p.c. of the total resources, including all classes of forest products, is to be found in Ontario, Quebec and the Maritime Provinces.

1.—Estimated Stand of Timber of Merchantable Size in Canada, by Regions, 1923.

Region.	Saw-material.		Pulpwood, Cordwood, Posts, etc.		Total.
	1,000 ft. b.m.	1,000 cu. ft.	1,000 cords.	1,000 cu. ft.	1,000 cu. ft.
SOFTWOOD.					
Eastern Provinces.....	76,101,000	16,666,115	552,210	64,700,590	81,366,705
Prairie Provinces.....	17,985,000	3,938,715	272,010	31,825,170	35,763,885
British Columbia.....	345,762,000	75,721,878	47,500	5,557,500	81,279,378
Total Softwood.....	439,848,000	96,326,708	871,720	102,083,260	198,409,968
HARDWOOD.					
Eastern Provinces.....	32,134,500	7,037,430	209,815	20,342,417	27,379,847
Prairie Provinces.....	9,305,000	2,037,795	196,010	18,620,950	20,658,745
British Columbia.....	788,000	172,572	2,160	205,200	377,772
Total Hardwood.....	42,227,500	9,247,797	407,985	39,168,567	48,416,364
Grand Total.....	482,075,500	105,574,505	1,279,705	141,251,827	246,826,332

5.—Forest Administration.

1.—Administration of Dominion and Provincial Timber Lands.

The Dominion Government administers Crown lands, including timber lands, in the provinces of Manitoba, Saskatchewan and Alberta and in the Railway belt and Peace River block of British Columbia.

In all other cases timber lands are administered by the provinces in which they occur. On the area under Dominion control and in most of the provinces, only the right to cut timber is disposed of, the title to the land remaining in the Crown, so that there are few privately owned timber lands other than farmers' wood lots. As new regions are explored, their lands are examined and the agricultural land disposed of. Absolute forest land is usually set aside for timber production, and the policy of disposing of the title to lands fit only for the production of timber has been virtually abandoned in every province in Canada. The ownership of forests by towns and communities, so common in Europe, is almost unknown in Canada, although efforts are being made to encourage the establishment and maintenance of forests of this nature.

Dominion Timber Lands.—Dominion timber lands are administered by three different branches of the Department of the Interior at Ottawa. The Forestry Branch is chiefly concerned with forest reserves and fire protection, the Timber and

Grazing Branch deals with timber berths, and the Dominion Parks Branch administers the Dominion parks, which are primarily national playgrounds and game preserves and on which the timber is reserved. The Board of Railway Commissioners for Canada has charge of fire protection along lines subject to its jurisdiction.

Forest reserves are primarily intended to supply the surrounding settlements with timber for local use, and to protect the watersheds. The method of disposal of this timber and the conditions under which it can be removed are such that regeneration of the natural forest is as well provided for as possible without actual replanting of cut-over areas. On all other Dominion timber lands, licenses to cut timber, renewable annually, are granted for stated areas. Regulations provide for cutting to a diameter limit and disposal of logging *débris*.

The export is prohibited of raw or unmanufactured timber cut from Dominion Crown lands and provincial Crown lands in every province but Nova Scotia.

British Columbia.—In the province of British Columbia, the Forest Branch of the Department of Crown Lands has administered timber lands since 1912. All unalienated lands in the province which are examined and found to be better suited to forest than to agricultural production are dedicated to forest production, and all timber lands carrying over a specified quantity of timber are withdrawn from disposal until examined by the Forest Branch. The present practice is to sell cutting rights for a stated period by public competition. The royalties are adjusted every five years on the basis of prevailing industrial conditions. About 3,000 square miles of timber land are privately owned.

Ontario.—In the province of Ontario, timber lands are administered by the Department of Lands and Forests. The sale of saw timber is by tender after examination. Conditions cover the removal within a specified period, disposal of *débris*, etc. Pulpwood areas are usually disposed of by individual agreements for 21 years. Manufacture in Canada was made a condition in the disposal of all softwood saw timber in 1897, of all pulpwood in 1900 and all hardwood in 1924. In some of the individual pulpwood agreements the licensee must undertake not only to erect a pulp-mill but also a paper-mill within the province, the type of mill being stipulated in the agreement. In this province about 7,972 square miles of forest land have been disposed of outright.

Quebec.—The Forest Service of the Department of Lands and Forests administers the timber lands in Quebec; its powers include the classification of land, disposal of timber and regulation of cutting operations. Licenses are granted after public competition and are renewable from year to year, subject to changes in royalty by the government at any time. Grants of land in fee simple, made in some cases under the French *régime* in Quebec, are responsible for the private ownership of about 34,173 square miles of forest land.

New Brunswick.—The Forest Service, under the Department of Lands and Mines, and a special Forestry Advisory Board form the forest authority in New Brunswick. At present timber lands are disposed of as in the other provinces, but in the past several grants of forest land were made to railway companies, private concerns and individuals who now own in fee simple about 10,675 square miles of forest land.

Nova Scotia.—In Nova Scotia the greater part of the forest land has passed into private ownership. What remains vested in the Crown is administered by the Commissioner of Crown Lands. Forest protection is conducted under the Commissioner of Forests and Game.

2.—Forest Fire Protection.

The protection of forests from fire is undoubtedly the most urgent and most important part of the work of the different agencies administering forest lands in Canada. In the case of the Dominion Government, this duty falls chiefly on the Forestry Branch of the Interior Department for all Dominion Crown timber lands, whether within forest reserves or not. Certain officers of the various forest authorities are appointed *ex officio* officers of the Board of Railway Commissioners and are responsible for fire protection along railway lines through Dominion lands. These guards co-operate with the railway fire rangers employed by the various railway companies, the compulsory patrol of all lines throughout the country being a Dominion law. Other Dominion legislation regulates the use of fire for clearing and other legitimate purposes and provides for closed seasons during dangerous periods.

Each of the Provincial Governments maintains a fire protection organization which primarily covers unoccupied Crown timber lands, but frequently co-operates with owners and licensees for the protection of all timbered areas, the cost being distributed or covered by special taxes on timber lands. An interesting development in this connection in the province of Quebec is the organization of a number of co-operative protective associations among lessees of timber limits. These associations have their own staffs, which co-operate with those of the Board of Railway Commissioners and the Provincial Government. This latter contributes in the way of money grants and also pays for the protection of vacant Crown lands lying within the areas of the association's activities.

The simplest form of patrol is carried on by men, generally travelling in pairs, on foot, on horseback or in canoes. The fire protective systems in use throughout Canada have been improved by the following measures: the extension of roads, trails and portages, the building of telephone lines throughout the forest, the establishment of lookout towers and stations, the use of air craft for detecting and reporting incipient fires and carrying men and supplies to fires already started, patrol by automobiles, boats and railway speeders, maintenance at strategic points of cabins for accommodation of patrolmen and supplies for fire-fighting, the use of portable forest fire pumps and the establishment of fire lanes and cleared fire guards through the forest and around fire hazards. In addition to these, certain legislative enactments have tended to reduce the fire menace. The establishment of closed seasons for brush burning by settlers during the dangerous dry periods has proved efficient, and the recently enacted laws for Quebec and New Brunswick, whereby all travelling in the woods during the fire season is regulated and restricted, have been of enormous value as preventive measures.

3.—Scientific Forestry.

The practice of forestry in Canada has consisted chiefly in the administration of existing forest areas. What little reforestation or afforestation has been done has been largely of an experimental nature. During recent years investigatory or forest research work has assumed considerable importance. The object of this work is to secure an inventory of Canada's timber resources, to ascertain the best methods of securing continuous production of desirable species by natural means, and the economic possibilities of establishing forests by artificial means. In addition to silvicultural research, investigations are being carried on for the purpose of determining the best methods of forest utilization or the converting of standing timber into saleable commodities.

Technical foresters are employed by the Dominion and Provincial Forest Services and by many pulp and lumber companies. In addition to administrative work, these men carry on forest reconnaissance and intensive forest surveys for the purpose of estimating and mapping standing timber and determining conditions affecting growth and reproduction of existing forests. They also direct experimental planting and experimental regulation of commercial logging operations. The Dominion Forest Service employs a special staff for forest investigatory work and has established an experimental forest station at Petawawa, Ontario, and at other points throughout the Dominion. The work is done in co-operation with the provincial services and with pulp and lumber companies, and is also carried on on Dominion forest reserves. The Forest Products Laboratories, established by the Dominion Forestry Branch in connection with McGill University, at Montreal, and the University of British Columbia, at Vancouver, carry on investigatory work in forest products, covering the strength, durability and other mechanical, physical and chemical qualities of Canadian woods, methods of seasoning, preservation from decay and chemical utilization in the pulp and paper and wood-distillation industries. The province of Quebec is organizing a Bureau of Forest Research under the Provincial Forester, supported by a generous annual appropriation. Much credit is due to the forestry departments of some of the pulp companies in Canada for pioneering work in forest research.

Education in forestry and allied subjects and opportunities for research are offered by four Canadian universities and by other agencies. The University of Toronto, the University of New Brunswick at Fredericton, and the University of British Columbia, at Vancouver, provide four-year courses leading to a professional degree. The School of Forestry and Surveying in connection with Laval University at Quebec provides a combined course in the French language of four years duration, leading to diplomas in both sciences. The Government of Quebec has established a school in paper-making at Three Rivers in the heart of the paper industry; several agricultural colleges provide short courses in farm forestry, and a school for forest rangers has been established in Quebec.

The practice of forestry by individuals and private concerns is encouraged by the furnishing of expert advice by Dominion and Provincial services and by the distribution of tree-planting material. The Dominion Forest Service maintains two nurseries in Saskatchewan, one at Indian Head and the other at Sutherland, near Saskatoon. From five to six million trees are distributed annually to farmers and ranchers in the Prairie Provinces for planting woodlots and windbreaks. If certain conditions are fulfilled, the material and instructions are provided free except for transportation charges.

The province of Ontario provides material under similar conditions, and distributes about 1,000,000 trees annually from its nurseries near St. Williams, in Norfolk county. To encourage the establishment of communal forests by towns and other municipalities, the provincial Government undertakes to plant free of charge any area purchased by the municipality for this purpose.

In Quebec, a forest nursery at Berthierville serves as a demonstration station for the School of Forestry and as a forest ranger school. It provides at present about half a million trees for sale and distribution in the province annually, comprising seedlings and transplants for forest planting, and larger trees for ornamental purposes. The capacity of the nursery is being raised to five million trees. Provision is made by legislation for the creation of communal forests.

6.—Forest Utilization.

The clearing of forest land was the primary step toward the settlement of eastern Canada by the early pioneers. The material so removed was at first more than sufficient for building purposes, fencing and fuel. In many cases logs and clearing *débris* were burned in order to get them out of the way. Later on, inroads were made into the forest surrounding the farms and settlements to supply these needs, and lumbering as a business developed gradually as the settlements extended, the demand increased and the supply receded. The industry, which started in the lower St. Lawrence valley and Maritime Provinces, spread northward and westward during the period of rapid advance in settlement.

The Ottawa valley became the first important centre of commercial activity in the industry, with the rafting of square timber to Quebec for export. The Georgian Bay and Rainy River districts were later opened up, and although the industry is now established over the entire Dominion these districts are still the chief lumbering regions in eastern Canada. Lumbering to the north of the Prairie Provinces has progressed with the colonization of this region, but the production does not usually exceed the local demand. Exploitation of the extensive forests of British Columbia proceeded simultaneously with similar development in the Pacific States across the border, and is steadily increasing in relative importance. In 1908 this province contributed less than a fifth of Canada's total lumber production, while in 1922 this proportion was over a third, indicating that the centre of production is rapidly moving westward.

1.—Woods Operations.

Differences throughout Canada in soil, climate, topography, average size of trees, density of stands and numerous other local conditions, give rise to differences in logging methods not only between provinces but between adjacent logging units in the same district. Generally speaking, throughout eastern Canada the climate is such that the cutting and hauling of logs can be carried on most economically during the fall and winter months. The trees are felled and the logs hauled mostly on sleighs by horses to the nearest stream or lake, where they are piled on the ice or sloping banks. Logging railways are sometimes used, in some cases hauling the logs directly to the mills. Tractors are being substituted for horses in many operations. The nature of the topography, the presence of connected systems of lakes and streams, makes it possible in most cases to float the logs from the forest to the mill at a minimum cost during the annual spring freshets. The logging industry east of the Rocky mountains is therefore almost entirely seasonal. In many cases lumbermen co-operate in river-driving operations, and improvement companies, financed by the logging operators, build dams, sluices and other river improvements to facilitate the passage of the floating logs, and tow the material across lakes and still stretches of river in booms or rafts. The logs, which carry the distinguishing stamp or brand of each operator, are finally sorted and delivered to their respective owners. In British Columbia the scarcity of drivable streams and the greater average size of the logs give rise to entirely different logging methods. Slides are built on suitable slopes to bring down timber from upper hillsides and benches, and logs are hauled and assembled by donkey engines and different cable systems. Logging railways are used extensively to carry logs to the mills or to lakes, large rivers or tidewater, where they can be assembled in booms or rafts and towed to the mills. These operations are more or less independent of frost, snow or freshet, and are carried on in most cases throughout the entire year.

In eastern Canada logging operations are usually carried on by the mill owners or licensees of timber lands, often through the medium of contractors, sub-contractors and jobbers. In the better settled parts of the country a considerable quantity of lumber is sawn by custom saw-mills or small mills purchasing logs from the farmers. Unmanufactured pulpwood, poles, ties and other forest products have a market value, but saw-logs, being as a rule the property of the mill-owner, are not generally marketed as such in eastern Canada. In British Columbia logging is carried on more frequently as a separate enterprise by limit holders, who cut and sell logs on the market. In many cases mill operators are not limit holders, but buy their entire supply of raw material from logging concerns.

In connection with woods operations, it should be borne in mind that the forests not only provide the raw material for saw-mills and pulp-mills, but in addition provide annually about 16,000,000 railway ties, 1,000,000 poles for telegraph, telephone and power lines, 14,000,000 fence posts, over 8,000,000 cords of firewood, together with piling, round mining timbers, square timber for export, wood for distillation, charcoal and excelsior manufacture, bark and wood for tanning extracts, maple syrup and sugar, and a number of minor products.

2.—The Lumber Industry.

The manufacture of lumber, lath, shingles and other products and by-products of the saw-mill forms the principal industry in Canada depending on the forest for its raw materials. Annual statistics covering this and other forest industries were collected and published by the Forestry Branch of the Interior Department from 1908 to 1916. Since that date the work has been carried on by the Dominion Bureau of Statistics, in co-operation with the Forestry Branch.

Table 2 gives the production of lumber, lath and shingles from 1908 to 1922 inclusive.

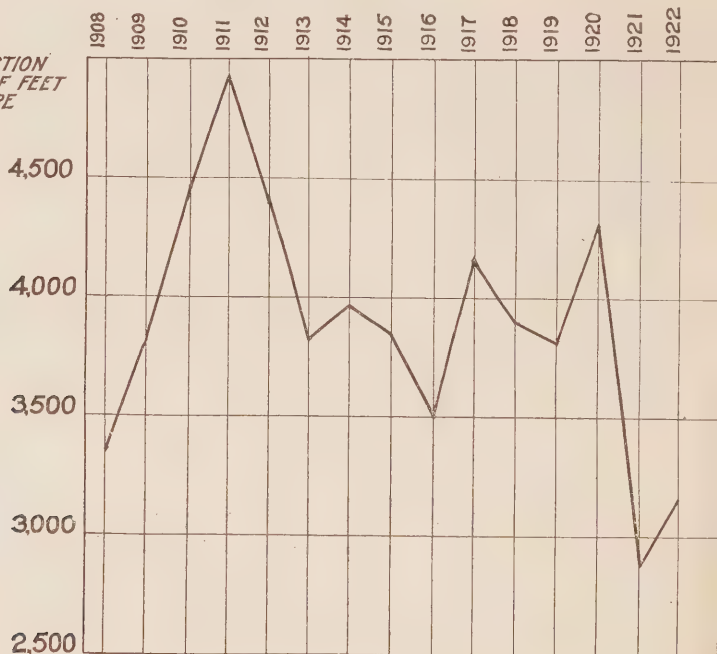
The production of sawn lumber in Canada in 1920 reached a total of over four billion feet, board measure, the highest cut recorded since 1912. This was followed, however, in 1921 by a period of depression which was general throughout all fields of industrial activity. The production of lumber in 1921 decreased by over a third and the average value by over \$10 a thousand feet. The cut during 1922 shows an increase of 9.4 p.c. in quantity, accompanied by an increase of over \$2,000,000 in total value. The average value decreased by less than \$2 a thousand.

2.—Lumber, Lath and Shingle Production in Canada, for the calendar years 1908-1922.

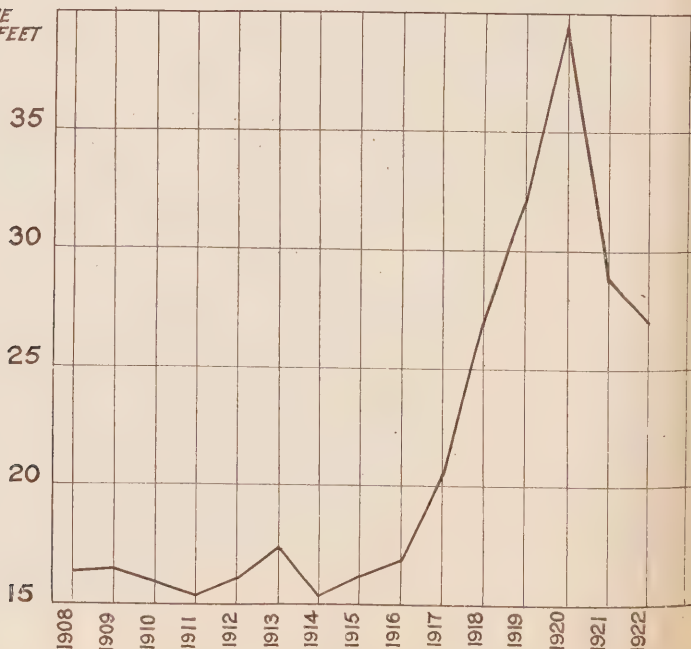
Years.	Lumber cut.		Shingles cut.		Lath cut.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	M ft. B. M.	\$	M.	\$	M.	\$
1908.....	3,347,126	54,338,036	1,499,396	3,101,996	671,562	1,487,125
1909.....	3,814,942	62,819,477	1,988,753	3,701,182	822,124	1,979,034
1910.....	4,451,652	70,609,233	1,976,640	3,557,211	851,953	1,943,544
1911.....	4,918,202	75,830,954	1,838,474	3,512,078	965,235	2,212,226
1912.....	4,389,723	69,475,784	1,578,343	3,175,319	899,016	2,064,622
1913.....	3,816,642	65,796,438	1,485,279	3,064,641	739,678	1,783,283
1914.....	3,946,254	60,363,369	1,843,554	3,688,746	625,010	1,585,484
1915.....	3,842,676	61,919,806	3,089,470	5,734,852	793,226	2,040,819
1916.....	3,490,550	58,365,349	2,897,562	5,962,933	665,588	1,743,940
1917.....	4,151,703	83,655,097	3,020,956	8,431,215	616,949	1,828,018
1918.....	3,886,651	103,700,620	2,662,521	8,184,448	438,100	1,369,616
1919.....	3,819,750	122,030,653	2,915,309	13,525,625	520,203	2,157,758
1920.....	4,298,804	168,171,987	2,855,706	14,695,159	762,031	5,248,879
1921.....	2,869,307	82,448,585	2,986,580	10,727,096	804,449	4,188,121
1922.....	3,138,598	84,554,172	2,506,956	10,397,080	1,031,420	5,690,328

VARIATIONS IN PRODUCTION AND AVERAGE VALUE OF LUMBER 1908 TO 1922.

TOTAL PRODUCTION
IN MILLIONS OF FEET
BOARD MEASURE



AVERAGE VALUE
PER THOUSAND FEET
IN DOLLARS



During 1922 a cut of 3,138,598,000 feet, board measure, of lumber valued at \$84,554,172 was reported (Table 3). The number of mills in operation in 1922 was 2,922 as compared to 3,126 in 1921, a reduction of $6\frac{1}{2}$ p.c., but the average production per mill increased from 918,000 feet in 1921 to 1,074,000 in 1922. The average number of days each mill was in operation in 1921 was only 82, while in 1922 the average number of days in operation increased to 90.

The total number of employees on salaries and wages was 31,892, as compared to 30,337 in 1921, an increase of 5 p.c. The total payroll was \$27,621,691, as compared with \$26,707,689 in 1921, an increase of 3 p.c. The average of earnings per employee for all classes shows a slight decrease from 1921, due chiefly to decreases in wages. Other agencies of production, such as fuel, power and miscellaneous expenses, showed decreases in 1922 from figures of the previous year.

Lath production increased in quantity and value from 804,449,000, valued at \$4,188,121, in 1921 to 1,031,420,000, valued at \$5,690,328, in 1922.

Shingle production showed a decrease in quantity and value from 2,986,580,000, valued at \$10,727,096, in 1921 to 2,506,956,000, valued at \$10,397,080, in 1922.

Other products and by-products of the saw-milling industry showed a general decrease in total value from \$8,798,326 to \$5,409,314. These products include veneer, box shooks, spoolwood, cooperage stock, sawn ties, etc. Pulpwood to the amount of 638,208 cords, valued at \$8,273,686, was cut up, barked or rossed in 1922, being a decrease in quantity and value from the figures for 1921.

The total value of all products of the saw-mills and allied mills during 1922 was \$114,324,580, as compared with \$116,891,191 for 1921, a decrease of $2\frac{1}{4}$ p.c.

The total capital invested in these mills in 1922 was \$162,835,219, representing a decrease of $12\frac{1}{2}$ p.c. from the investment in 1921.

Table 3 shows the production during 1922 by kinds of wood and Table 4 gives the same information by provinces.

3.—Total Production of Lumber, Lath and Shingles in Canada, by Kinds of Wood, for the calendar year 1922.

Kinds of Wood.	Lumber.		Lath.		Shingles.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	M ft. B.M.	\$	M.	\$	M.	\$
Softwoods—						
Spruce.....	1,018,333	25,743,197	589,433	3,153,313	27,742	94,175
Douglas fir.....	820,724	18,778,646	65,657	362,000	—	—
White pine.....	576,292	20,520,044	228,923	1,373,615	12,667	41,611
Hemlock.....	204,742	4,848,002	42,423	239,976	2,364	8,320
Cedar.....	102,603	3,275,171	14,777	84,520	2,457,916	10,233,228
Balsam fir.....	97,716	2,174,750	38,271	196,085	3,859	11,595
Red pine.....	67,173	1,993,033	21,167	118,950	—	—
Jack pine.....	43,209	996,534	23,458	125,237	2,106	7,112
Yellow pine.....	30,708	715,405	3,793	21,437	—	—
Tamarack.....	30,087	628,875	2,046	9,234	—	—
Yellow cypress.....	42	1,260	—	—	—	—
Total Softwoods.....	2,991,629	79,674,917	1,029,948	5,684,367	2,506,651	10,396,041
Hardwoods—						
Yellow birch.....	49,552	1,635,570	83	449	—	—
Maple.....	30,185	1,052,831	20	120	—	—
Basswood.....	18,036	594,763	193	1,008	—	—
Elm.....	15,515	519,883	—	—	—	—
White birch.....	11,414	308,784	250	1,310	—	—
Ash.....	6,175	196,676	4	12	—	—
Beech.....	4,841	140,700	2	20	—	—
Poplar.....	3,498	86,422	19	98	87	251
Oak.....	2,572	119,943	—	—	—	—
Chestnut.....	479	22,586	—	—	—	—

3.—Total Production of Lumber, Lath and Shingles in Canada, by Kinds of Wood, for the calendar year 1922—concluded.

Kinds of Wood.	Lumber.		Lath.		Shingles.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	M ft. B. M.	\$	M.	\$	M.	\$
Hardwoods—concluded.						
Butternut.....	280	9,827	—	—	—	—
Cherry.....	196	7,583	—	—	—	—
Hickory.....	135	6,712	—	—	—	—
Walnut.....	76	3,537	—	—	—	—
Red alder.....	20	360	—	—	—	—
Tulip.....	14	1,000	—	—	—	—
Sycamore.....	5	150	—	—	—	—
Total Hardwoods.....	142,993	4,797,327	571	3,017	87	251
Unspecified.....	3,976	81,928	901	2,944	215	788
Grand Total.....	3,138,598	84,554,172	1,031,420	5,690,328	2,506,956	10,397,680

4.—Production of Lumber, Lath and Shingles in Canada, by Provinces, for the calendar year 1922.

Provinces.	Lumber.		Lath.		Shingles.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	M ft. B.M.	\$	M.	\$	M.	\$
Prince Edward Island.....	3,472	85,043	302	1,387	4,054	12,204
Nova Scotia.....	101,451	2,509,912	63,496	282,147	11,648	37,610
New Brunswick.....	360,030	8,906,894	378,167	1,081,172	219,769	739,655
Quebec.....	649,354	17,489,026	214,548	1,122,999	401,328	1,328,718
Ontario.....	776,280	25,687,380	259,711	1,562,521	43,703	157,660
Manitoba.....	54,930	1,371,062	15,585	73,297	—	—
Saskatchewan.....	9,609	283,922	3,774	18,815	—	—
Alberta.....	25,618	649,791	5,378	12,111	125	312
British Columbia.....	1,157,854	27,571,142	90,459	716,765	1,826,329	8,120,921
Total.....	3,138,598	84,554,172	1,031,420	5,690,328	2,506,956	10,397,680

Tables 5 and 6 show the imports and exports of forest products by chief classes for the calendar years 1920 to 1922, statistics which may be compared with those of production given in the tables above.

5.—Imports of Forest Products by Chief Classes, calendar years 1920-1922.

Classes.		Quantity.			Value.		
		1920.	1921.	1922.	1920.	1921.	1922.
					\$	\$	\$
Lumber, rough sawn.....	M ft.	112,978	70,425	83,254	11,139,320	3,950,333	4,886,323
“ dressed on one side.....	“	52,697	46,273	59,245	3,347,955	1,678,839	2,034,626
“ matched.....	“	2,318	7,181	5,242	217,753	266,717	276,309
Total sawn lumber.....	“	167,993	123,879	147,741	14,705,028	5,896,069	7,197,258
Lath.....	M	8,355	7,167	962	80,258	51,274	6,421
Shingles.....	“	8,328	4,433	10,065	30,570	20,415	36,309
Veneer.....	\$	—	—	—	1,040,375	343,365	297,550
Timber, hewn or sawn.....	\$	—	—	—	150,468	35,832	37,377
Railway ties.....	No.	994,310	1,441,601	540,424	1,121,095	2,335,697	679,020
Logs.....	\$	—	—	—	496,740	465,622	258,136
Poles.....	No.	115,957	30,544	1,892	268,620	73,805	7,011
Posts.....	\$	—	—	—	31,640	11,389	13,453
Fuel wood.....	Cords	9,277	8,895	9,002	31,194	35,101	36,571
Miscellaneous wood.....	\$	—	—	—	1,564,604	354,912	290,796
Cork, canes, reed, etc.....	\$	—	—	—	84,898	255,373	286,356
Total Imports.....	\$	—	—	—	19,605,490	9,878,854	9,146,258

6.—Exports of Forest Products by Chief Classes, calendar years 1920-1922.

Classes.	Quantity.			Value.		
	1920.	1921.	1922.	1920.	1921.	1922.
				\$	\$	\$
Sawn lumber.....M ft.	1,924,952	1,024,227	1,993,551	83,330,477	37,159,008	58,063,896
Lath.....M	446,404	808,132	1,295,910	4,105,953	5,301,286	7,643,710
Shingles.....M	1,970,466	2,192,979	2,358,992	11,419,955	7,507,526	9,210,961
Timber squared.....M ft.	42,950	55,103	55,140	1,899,444	1,699,530	1,492,344
Railway ties.....No.	1,887,244	1,853,296	965,288	2,116,411	2,248,185	684,247
Logs.....M ft.	66,495	119,320	185,489	1,836,315	2,117,097	3,270,575
Poles.....No.	112,184	152,713	306,421	439,092	653,334	1,211,592
Posts.....\$	—	—	—	209,292	36,933	64,020
Piling.....Lin. ft.	1,818,483	1,399,486	1,365,538	250,284	163,907	119,290
Pulpwood.....Cords	1,247,404	1,092,553	1,011,332	15,778,171	14,617,610	10,359,762
Fuelwood....."	29,880	1,824	11,570	117,224	81,686	70,168
Miscellaneous.....\$	—	—	—	2,648,474	2,550,470	2,278,674
Total Exports.....\$	—	—	—	124,151,692	74,136,572	94,469,239

The first timber shipped from Canada to Europe was during the French *régime* in 1667, and consisted mostly of square timber and masts and spars for the French navy. The export to England began to develop in the early part of the 19th century. Quebec was the centre of the square and waney timber trade, which reached its maximum in 1864, when as many as 1,350 sailing vessels entered that port and carried away over 20,000,000 cubic feet of timber, most of which was white or "Quebec" pine. The increase in the production of sawn lumber, the "deal trade," and the increasing scarcity of suitable material resulted in a steady decline in the exports of square and waney timber, and Montreal became the centre of activity in exportation. The exports of square and waney timber have now fallen to about 4,000,000 cubic feet.

With the growing production of deals and other sawn lumber, the trade with the United States increased until in 1923 Canada exported almost 2,000,000,000 feet of sawn lumber to that country. The total value of exported sawn lumber and other unmanufactured or partially manufactured forest products in the fiscal year ended Mar. 31, 1924, was over \$126,000,000, of which about \$100,000,000 worth went to the United States and \$12,000,000 worth to the United Kingdom. The remaining export trade was widely distributed throughout both trans-Atlantic and trans-Pacific channels.

3.—The Pulp and Paper Industry.

The manufacture of pulp and paper is a comparatively recent development in Canadian industry. Paper was first manufactured in Canada about a hundred years ago, but prior to 1860 no wood-pulp was used or produced. Rags, straw, esparto grass, cotton waste and other substances were the raw materials used. The first paper-mill was established at St. Andrews in Quebec (then Lower Canada) in 1803 by a party of Americans who obtained concessions from the seigneurs. In 1825, at Crook's Hollow, was erected the first paper-mill in what was then Upper Canada. Mr. Crooks, the founder, earned a bounty from the Government of £100 for the first sheet of paper made in the province.

What is claimed to be the first wood-pulp mill in Canada was erected by Angus Logan and Company at Windsor Mills, Quebec, about 1870. The Riordons were among the first to manufacture groundwood pulp, and in 1887 Charles Riordon brought the sulphite process from Austria, and installed at Merritton a sulphite mill which is still in existence. In the census of 1871 no pulp-mills are mentioned, but in

1881 five mills were in operation, with a total capital of \$92,000, 68 employees and an output valued at \$63,000. In 1891 there were 24, and in 1901, 25 mills. Since that date the advance in this industry has been still more rapid. At the present time there are in existence in Canada about 50 pulp-mills, 35 combined pulp and paper mills and 40 mills making paper only, although not all of these are operating at present. This development is due chiefly to the existence in Canada of abundant water powers adjacent to extensive forest resources of pulpwood species. The importance of this combination is evident from the fact that energy to the extent of practically 100 h.p. is necessary for the production of one ton of paper.

The industry in Canada includes three forms of industrial activity, the operations in the woods with pulpwood as a product, the manufacture of pulp and the manufacture of paper. These three stages cannot be treated as entirely distinct nor can they be separated from the different stages of the lumber industry. Some of the important pulp companies operate saw-mills to utilize the larger timber on their limits to the best advantage, and many lumber manufacturers divert a proportion of their spruce and balsam logs to pulp-mills. As far as operations in the woods are concerned, it is often impossible to state whether the timber being cut will eventually be made into lumber or pulpwood.

On account of legislation already referred to, pulpwood cut on Crown lands in every province but Nova Scotia must be manufactured into pulp in Canadian pulp-mills. Pulpwood cut on lands held in fee simple may be exported, and a large proportion of it is sent to the United States. Raw or unmanufactured pulpwood has therefore a definite market value. Table 7 and the diagram show the annual production of this commodity from 1908 to 1923, together with the quantities used by Canadian pulp-mills and the quantities exported.

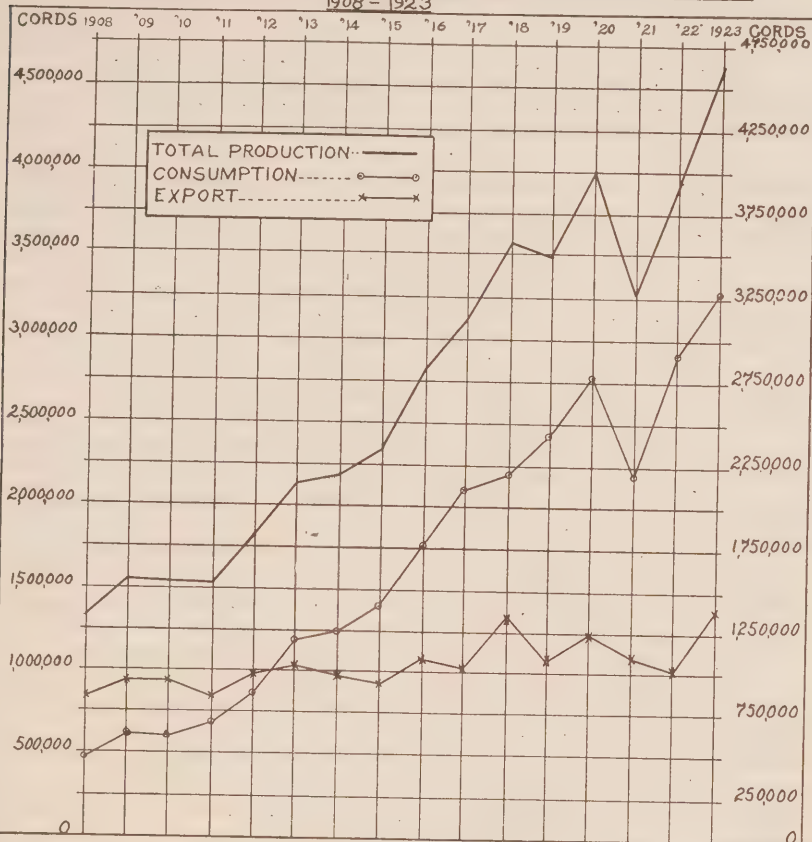
7.—Production, Consumption and Export of Pulpwood, calendar years, 1908-1923.

Years.	Total Production of Pulpwood.			Used in Canadian Pulp-mills.		Exported Unmanufactured.	
	Quantity.	Total value.	Average value per cord.	Quantity.	Per cent of total production.	Quantity.	Per cent of total production.
	Cords.	\$	\$	Cords.	p.c.	Cords.	p.c.
1908.....	1,325,085	7,732,055	5-84	482,777	36-4	842,308	63-6
1909.....	1,557,753	9,316,610	5-98	622,129	39-9	935,624	60-1
1910.....	1,541,628	9,795,196	6-35	598,487	38-8	943,141	61-2
1911.....	1,520,227	9,678,616	6-37	672,288	44-2	847,939	55-8
1912.....	1,846,910	11,911,415	6-46	866,042	46-8	980,868	53-2
1913.....	2,144,064	14,313,939	6-67	1,109,034	51-7	1,035,030	48-3
1914.....	2,196,884	14,770,358	6-72	1,224,376	55-7	972,508	44-3
1915.....	2,355,550	15,590,330	6-61	1,405,836	59-7	949,714	40-3
1916.....	2,833,119	19,971,127	7-05	1,764,912	62-3	1,068,207	37-7
1917.....	3,122,179	26,739,905	8-56	2,104,334	67-4	1,017,845	32-6
1918.....	3,560,280	37,886,259	10-64	2,210,744	62-1	1,349,536	37-9
1919.....	3,498,981	41,941,287	11-99	2,428,706	69-4	1,070,275	30-6
1920.....	4,024,826	61,183,060	15-22	2,777,422	69-0	1,247,404	31-0
1921.....	3,273,131	52,900,872	16-16	2,180,578	66-6	1,092,553	33-4
1922.....	3,923,940	50,735,361	12-93	2,912,608	74-2	1,011,332	25-8
1923.....	4,654,663	57,119,596	14-42	3,270,433	70-3	1,384,230	29-7

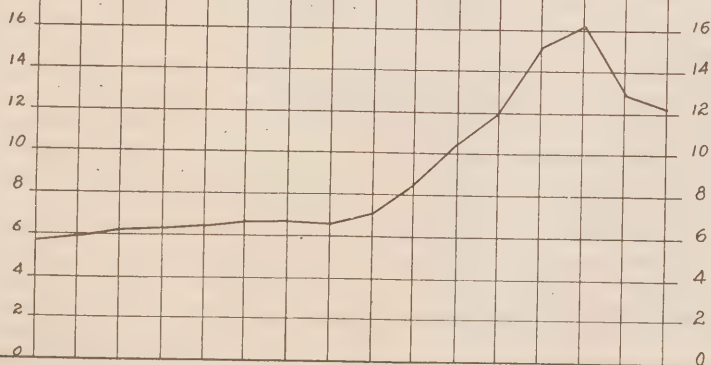
Since 1902 the exports of raw pulpwood have gone exclusively to the United States and have amounted annually to about 1,000,000 cords. The exportation of raw pulpwood, as shown in the accompanying diagram, has remained practically constant since 1912, while the quantity consumed in Canadian pulp-mills has increased almost fourfold during the same period. In 1908, almost two-thirds of

PULPWOOD PRODUCTION, MANUFACTURE AND EXPORT

1908 - 1923



AVERAGE VALUE Per CORD



the pulpwood cut in Canada was exported in the raw or unmanufactured form. In 1923, with an increase of almost 300 p.c. in total production, the proportion exported has fallen to less than one-third.

The manufacture of pulp forms the second stage in this industry. This is carried on by mills producing pulp alone and also by paper manufacturers operating pulp-mills in conjunction with paper-mills for the purpose of providing their own raw material. Such mills usually manufacture a surplus of pulp for sale in Canada or for export.

The supply of rags for paper-making is distinctly limited and the material too expensive for the manufacture of cheap paper. Early paper makers experimented with fibres from the stems, leaves and other parts of numerous annual plants, but the small proportion of paper-making material recoverable from such sources led to experiments in the use of wood. Different species were tried, and finally spruce and balsam fir were found to be the most suitable for the production of all but the best classes of paper.

The wood is delivered to the pulp-mill in different ways. Logs eight feet and upwards are either floated in booms or rafts or delivered in railway cars. Wood cut in two foot or four foot lengths is seldom driven but is delivered by railway car or vessel. This material may be either peeled or barked or delivered with the bark on. Generally speaking, wood sold by farmers is cut to short lengths and peeled by hand in the woods. Material cut in log lengths must pass first through a "cut-up" mill where it is cut into two or four foot lengths. The next stage in its preparation is the removal of the bark in a "rossing" mill. This is accomplished by the rubbing together of the logs in a revolving drum or by the removal of the bark by revolving knives. This last method produces the cleanest pulpwood but results in the loss of a considerable proportion of the wood itself. This preliminary preparation of pulpwood is frequently carried on at the pulp-mill, but there are in Canada a number of "cutting up" and "rossing" mills operating on an independent basis, chiefly for the purpose of saving freight on material cut at a distance from the mill or on material intended for exportation. Logs are measured in board feet but the shorter material is measured by the cord (4' by 4' by 8' of piled material), which is approximately equivalent to 500 feet board measure or to 90 cubic feet of solid wood. Generally speaking, it takes about one cord of wood to make a ton of groundwood and two cords to make a ton of chemical pulp.

There are in Canada four methods of preparing wood pulp, one of which is mechanical and three chemical. In the mechanical method, green coniferous woods are preferred; spruce forms over 80 p.c. of the total, with balsam fir, hemlock and jack pine. Soft "hardwoods", such as paper birch, white birch and poplar, are occasionally used. The barked and cleaned wood is held by hydraulic pressure against the surface of a revolving grindstone, the sticks lying with their length parallel to the width of the stone. The stone is constantly washed by water, which carries away the pulp in suspension. Mechanically prepared pulp or "groundwood" is used only for the cheaper grades of paper and board which are required only for a comparatively short time. It contains all the wood substance, a large proportion of which is not durable. Mixed with chemical pulp, it is used for news, wall, cheap book, manila, tissue, wrapping, bag and building papers, and for box boards, container boards and wall boards.

There are three methods of producing chemical fibre in use in Canada—the sulphite, sulphate (or kraft) and the soda process, so-called because of the chemicals used in each case to dissolve out the non-fibrous or non-cellulose components

of wood substance. Cellulose, which forms about 50 p.c. of wood substance, is the ideal paper-making material. It is a singularly inert substance, largely unaffected by ordinary chemical agents, atmospheric conditions, bacteria and fungi. High grade paper, being almost pure cellulose, will remain in perfect condition for centuries. Not only do the chemicals used separate out the cellulose, but they remove the fats and resins so troublesome in paper-making, and break down the substance which holds the cellulose fibres together, so that they can be later felted together into a strong sheet of paper.

The sulphite process, which is the most important in use in Canada, depends on the action of a bisulphite liquor (a comparatively weak acid solution of calcium and magnesium bisulphite) on the non-cellulose wood component. This liquor is prepared by burning sulphur or pyrites and absorbing the resulting sulphur dioxide gas in a milk-of-lime solution or in water, in the presence of limestone.

The woods used in this process in Canada are all coniferous. Spruce forms 65 p.c., balsam 24 p.c., hemlock 10 p.c., together with small quantities of other conifers. The previously barked and cleaned pulpwood is chipped in a machine which reduces the wood to particles about an inch long and a quarter of an inch thick, or smaller. These chips are screened, crushed and fed into digesters—large steel tanks lined with acid-resisting brick—where they are cooked by steam in the presence of the bisulphite liquor referred to. The cooked chips are then “blown” into pits below the digesters and washed in preparation for screening. Sulphur and lime are the most important chemicals used in this process, and their recovery, or the economic utilization of waste sulphite liquor, is still largely an unsolved problem.

Sulphite fibre is used in the manufacture of newsprint paper, in which it forms about 20 p.c. of the pulp used, adding strength to the remaining 80 p.c. of ground-wood pulp. It is used for the better classes of white paper and boards, either pure or in mixture with the other fibres.

The soda process is the oldest chemical process, and depends on the action of an alkaline solvent, caustic soda, on the non-fibrous components. This caustic soda is prepared from soda ash dissolved in water and boiled with lime or is produced electrolytically from brine. Most of the chemicals used in this process are recoverable. The wood of the softer so-called “hardwoods” or broad-leaved trees, such as poplar, basswood, willow, etc., is used almost exclusively in this process. The wood is prepared as in the other chemical processes and the chips are cooked in unlined metal digesters. The resultant fibre is used in the manufacture of the best class of book, magazine and writing papers, as a filler mixed with stronger pulp. The result is a paper which lacks strength but can be readily finished to a good surface.

The manufacture of sulphate or kraft pulp is a comparatively recent modification of the soda process. It was first used in America by the Brompton Pulp and Paper Company at East Angus, Quebec, in 1907, and was treated as soda pulp in statistical reports up to 1912. The process was first introduced with the intention of reducing the manufacturing cost of soda pulp by substituting salt cake (sodium sulphate) for the more expensive soda ash (sodium carbonate). Subsequent developments showed that, by an adaptation of this process, the superior strength of coniferous wood fibre could be taken advantage of, and at the present time the woods used are almost exclusively coniferous. Spruce heads the list with about 65 p.c. of the total, followed by jack pine with about 20 p.c., hemlock with about 10 p.c., and other conifers in smaller proportions. The chipped wood is treated with the caustic solution in unlined steel digesters. The cooking process is carried

on just long enough to obtain fibres that can be easily separated. The fibres so obtained are long, flexible and very strong, and are used in the manufacture of so-called kraft papers used for wrapping, bags, etc.

The pulp or fibre from all four processes leaves the grinders or digester pits in a fluid state, consisting of water with a small proportion of fibre held in suspension. It is first screened and thickened, and may then be piped direct to the paper mill. For shipping or storing, it is usually dried out sufficiently to allow it to be formed into sheets and folded into bundles or "laps." For export, these "laps" are baled by hydraulic presses. In some cases the pulp is dried for export by converting it into what is practically a coarse form of paper. Groundwood pulp is sold in laps, either wet or pressed. Sulphite pulp is marketed in laps, sheets or rolls, and soda pulp is usually shipped in rolls.

Table 8 shows the total production of pulp in Canada from 1908 to 1923 inclusive, together with the production of groundwood pulp and the production of fibre by the three chemical processes described. Statistics of values are not available from 1908 to 1916.

8.—Pulp Production, Mechanical and Chemical, calendar years 1908-1923.

Years.	Total Production. ¹		Mechanical Pulp.		Chemical Fibre.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Tons.	\$	Tons.	\$	Tons.	\$
1908.....	363,079	—	278,570	—	84,509	—
1909.....	445,408	—	325,609	—	119,799	—
1910.....	474,604	—	370,195	—	104,409	—
1911.....	496,833	—	362,321	—	134,512	—
1912.....	682,632	—	499,226	—	183,406	—
1913.....	854,624	—	600,216	—	254,408	—
1914.....	934,700	—	644,924	—	289,776	—
1915.....	1,074,805	—	743,776	—	331,029	—
1916.....	1,296,084	—	827,258	—	468,826	—
1917.....	1,464,308	65,515,335	923,731	25,918,811	540,423	38,374,191
1918.....	1,557,193	64,356,173	879,510	19,112,727	677,683	45,243,446
1919.....	1,716,089	73,320,278	990,902	23,316,828	725,187	50,003,450
1920.....	1,960,102	141,552,862	1,090,114	49,890,337	848,528	90,053,999
1921.....	1,549,082	78,338,278	931,560	32,313,848	612,467	45,929,513
1922.....	2,150,251	84,947,598	1,241,185	31,079,429	897,533	53,615,692
1923.....	2,475,904	99,073,203	1,419,547	37,587,379	1,012,092	60,674,518

¹These totals include some unspecified pulp and screenings.

NOTE.—No values available, 1908 to 1916.

The steady growth of this industry up to 1920, when 1,960,102 tons of pulp were produced, will be seen from the above figures. There was a drop in production in 1921, but the production of 1922 reached the highest point in the history of the industry and was followed by a further increase in 1923.

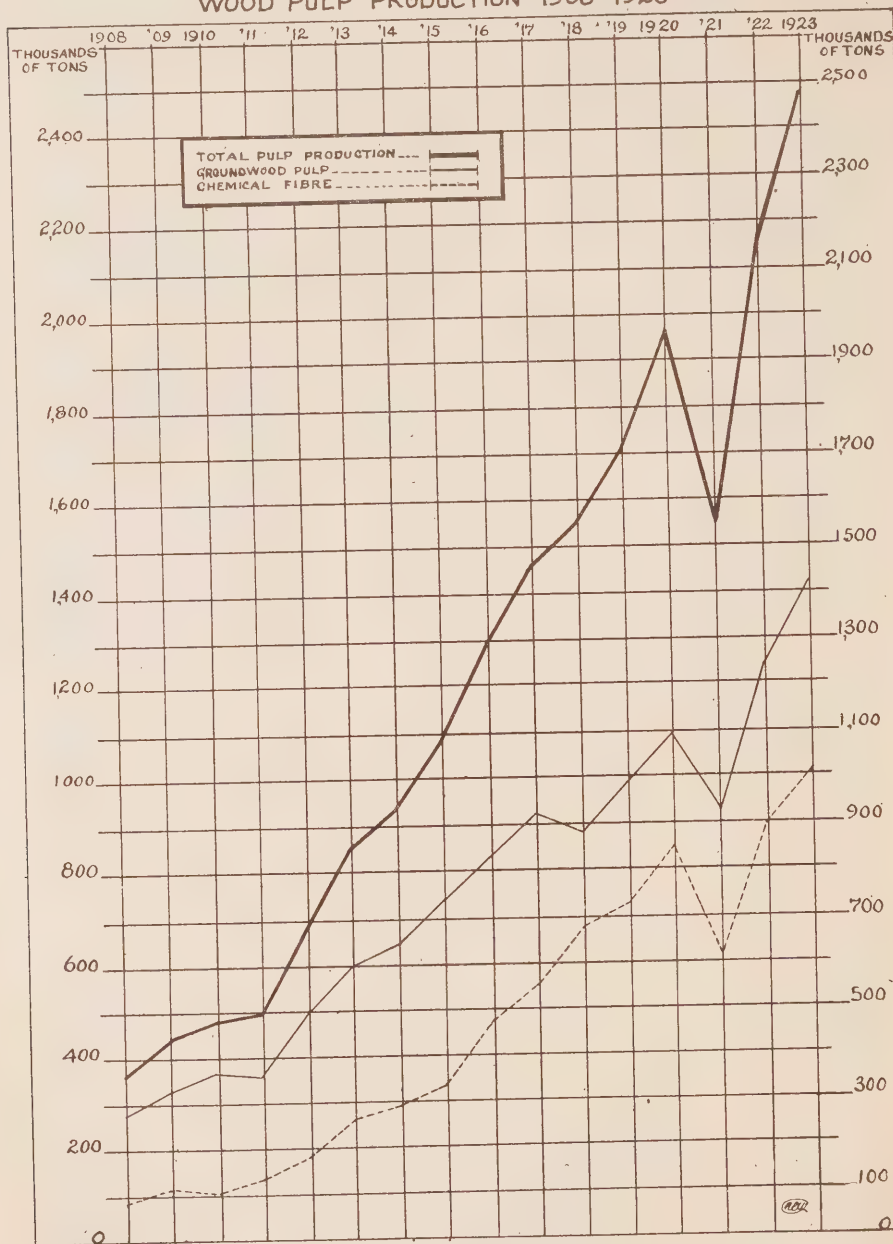
Table 9 gives production of pulp in Canada in 1922 and 1923, by processes and by provinces. During 1923 there were 43 mills manufacturing pulp only and 32 combined pulp and paper mills. These 75 establishments turned out 2,475,904 tons of pulp, valued at \$99,073,203, as compared with 2,150,251 tons, valued at \$84,947,598, in 1922, representing an increase of 325,653 tons or 15.1 p.c. in quantity. Of the 1923 total for pulp, 1,404,488 tons, valued at \$42,748,137, were made in the combined pulp and paper mills for their own use in manufacturing paper. The surplus, together with the product of the pulp-mills, amounting to 1,071,416 tons, valued at \$56,325,066, was sold in Canada or exported. As in the case of pulpwood, a part of the product of this stage of the industry provides raw material for the later stages, while the remainder has a definite market value as such.

9.—Pulp Production by Classes and Provinces, calendar years 1922 and 1923.

Kinds of Pulp by Provinces.	Quantity.		Value.	
	1922.	1923.	1922.	1923.
	Tons of 2,000 lbs.	Tons of 2,000 lbs.	\$	\$
Quebec—				
Groundwood.....	612,597	729,627	15,284,012	20,381,123
Soda.....	793	1,453	57,815	103,927
Sulphite, bleached.....	44,257	45,895	3,880,472	4,095,156
Sulphite, unbleached.....	244,578	268,365	13,503,038	14,648,567
Sulphate.....	178,260	180,587	10,436,498	10,886,008
Screenings.....	7,720	16,239	167,905	327,679
Total.....	1,088,205	1,242,166	43,329,740	50,442,460
Ontario—				
Groundwood.....	483,664	544,047	12,655,780	14,382,433
Soda.....	—	—	—	—
Sulphite, bleached.....	30,458	71,131	2,505,462	5,823,776
Sulphite, unbleached.....	196,392	221,010	11,330,995	11,811,427
Sulphate.....	13,150	16,465	697,305	1,044,014
Screenings.....	2,644	24,969	74,132	405,584
Other fibre.....	—	299	—	13,800
Total.....	726,308	877,921	27,263,674	33,481,035
British Columbia—				
Groundwood.....	100,483	107,267	1,771,178	1,697,293
Sulphite, bleached.....	24,077	23,338	1,547,963	1,500,633
Sulphite, unbleached.....	63,997	75,212	2,999,699	3,498,262
Sulphate.....	9,869	9,932	663,285	573,325
Screenings.....	—	1,963	—	55,629
Total.....	198,426	217,712	6,982,125	7,325,142
New Brunswick—				
Groundwood.....	6,879	11,627	201,712	288,171
Sulphite, bleached.....	47,898	49,571	3,758,007	3,887,504
Sulphite, unbleached.....	27,221	31,304	1,388,637	1,746,077
Sulphate.....	16,583	17,829	846,516	1,055,842
Screenings.....	1,169	795	10,440	8,614
Total.....	99,750	111,126	6,205,312	6,986,208
Nova Scotia—				
Groundwood.....	37,562	26,979	1,166,747	838,358
Total.....	37,562	26,979	1,166,747	838,358
SUMMARY.				
Groundwood.....	1,241,185	1,419,547	31,079,429	37,587,379
Soda.....	793	1,453	57,815	103,927
Sulphite, bleached.....	146,690	189,935	11,691,904	15,307,069
Sulphite, unbleached.....	532,188	595,891	29,222,369	31,704,333
Sulphate.....	217,862	224,813	12,643,604	13,559,189
Screenings.....	11,533	43,966	252,477	797,506
Other fibre.....	—	299	—	13,800
Total for Canada.....	2,150,251	2,475,904	84,947,598	99,073,203

The paper-making stage of the industry involves the consumption of wood pulp and other paper stock in the manufacture of paper and other pulp products. Accurate annual statistics for this part of the industry are only available for the years 1917 to 1923, inclusive. These are given in Table 10. The main classes are further subdivided into about thirty sub-classes of which details are given in Table 11 for the years 1922 and 1923.

WOOD PULP PRODUCTION 1908-1923



10.—Summary of Paper Production in Canada, calendar years 1917-1923.

Years.	Newsprint Paper.		Book and Writing Paper.		Wrapping Paper.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Tons.	\$	Tons.	\$	Tons.	\$
1917.....	689,847	38,868,084	48,141	9,310,138	50,360	646,750
1918.....	734,783	46,230,814	48,160	10,732,807	61,180	7,341,372
1919.....	794,567	54,427,879	58,228	12,571,000	59,697	7,979,418
1920.....	875,696	80,865,271	73,196	21,868,807	77,292	12,161,303
1921.....	805,114	78,784,598	53,530	12,550,520	52,898	6,634,211
1922.....	1,081,364	75,971,327	64,808	12,560,504	81,793	8,219,841
1923.....	1,251,541	93,213,340	76,789	13,532,135	84,912	7,666,174

Years.	Boards.		Other Specified Paper Products.		Total Paper.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Tons.	\$	Tons.	\$	Tons.	\$
1917.....	54,080	3,543,164	11,261	1,382,205	853,689	58,750,341
1918.....	87,749	5,551,400	35,862	3,267,142	967,724	73,123,544
1919.....	137,678	8,892,046	40,065	3,882,500	1,090,235	87,752,843
1920.....	158,041	12,904,662	30,726	4,222,724	1,214,951	132,022,767
1921.....	89,120	6,225,948	18,285	2,358,658	1,018,947	106,553,935
1922.....	113,200	7,000,081	25,650	2,508,325	1,366,815	106,260,078
1923.....	130,582	8,480,233	45,479	5,042,488	1,589,303	127,984,370

11.—Paper Production in Canada, by Classes, calendar years 1922 and 1923.

Classes.	Quantity.		Value.	
	1922.	1923.	1922.	1923.
	Tons of 2,000 lbs.	Tons of 2,000 lbs.	\$	\$
Newsprint Paper—				
In rolls.....	1,056,995	1,230,298	74,068,178	91,490,113
In sheets.....	18,600	14,061	1,422,805	1,134,776
Hanging or wall paper.....	5,597	6,940	449,524	548,977
Poster paper.....	172	242	30,820	39,474
Total Newsprint.....	1,081,364	1,251,541	75,971,327	93,213,340
Book and Writing Paper—				
Book, wood fibre chief ingredient.....	31,626	29,682	5,044,605	4,291,478
Book, rags chief ingredient.....	—	1,250	—	240,000
Cover.....	160	409	41,070	103,588
Plate, map, lithograph, etc.....	4,730	270	803,150	43,200
Cardboard, bristol board, etc.....	1,906	6,314	326,355	853,744
Coated paper.....	7,940	10,922	1,702,433	2,115,079
Writing paper.....	15,543	15,287	4,141,539	3,876,571
All other fine paper.....	2,903	12,655	501,352	2,058,475
Total Book.....	64,808	76,789	12,560,504	13,532,135
Wrapping Paper—				
Manila (rope, jute, tag, etc.).....	3,300	2,604	480,864	286,393
Heavy wrapping (mill wrappers).....	22,792	20,002	1,203,450	829,490
Straw wrapping.....	160	1,950	3,200	39,000
Bogus or wood manila.....	9,027	8,510	1,072,556	885,254
Kraft.....	38,645	42,851	4,450,605	4,464,198
All other wrapping.....	7,869	8,995	1,009,166	1,061,839
Total Wrapping.....	81,793	84,912	8,219,841	7,666,174
Boards—				
Woodpulp board.....	60,210	76,575	3,500,479	4,798,666
Strawboard.....	5,413	5,894	318,784	408,782
Chipboard.....	19,492	22,896	1,089,040	1,511,793
Newsboard.....	362	553	20,685	40,057
Testboard.....	5,587	5,825	306,193	564,074
Trunk, leather, binder's and pressboard.....	3,858	429	487,133	76,420
Wallboard.....	988	3,677	29,167	114,228
All other boards.....	17,290	14,733	1,248,600	966,213
Total Boards.....	113,200	130,582	7,000,081	8,480,233

**11.—Paper Production in Canada, by Classes, calendar years
1922 and 1923—concluded.**

Classes.	Quantity.		Value.	
	1922.	1923.	1922.	1923.
	Tons of 2,000 lbs.	Tons of 2,000 lbs.	\$	\$
Other Paper—				
Tissue.....	2,327	2,184	504,036	1,245,085
Toilet.....	3,431	2,796	650,736	546,795
Blotting.....	—	193	—	46,320
Building, roofing and sheathing.....	19,892	32,797	1,353,553	2,315,688
Asbestos paper.....	—	—	—	—
Pure vegetable parchment.....	—	—	—	—
Miscellaneous paper.....	—	7,509	—	888,600
Total Other Paper.....	25,650	45,479	2,508,325	5,042,488
Total Specified Paper.....	1,366,815	1,589,303	106,260,078	127,984,370
Unspecified Products.....	—	—	825,688	105,239
Total All Products.....	—	—	107,085,766	128,089,609

During 1923 there were 32 combined pulp and paper mills and 35 mills making paper only. These 67 establishments produced 1,589,303 tons of paper, together with certain miscellaneous pulp products, with a total value of \$128,089,609, an increase of 16.2 p.c. in quantity over 1922. Newsprint paper forms annually about 80 p.c. of the paper production in Canada. In 1923 this class of paper amounted to 1,251,541 tons, valued at \$93,213,340, an increase of 15.7 p.c. over 1922.

While the manufacture of pulp and the manufacture of paper are properly two distinct industries, the existence of combined pulp and paper mills makes it impossible to separate many of their statistics. There were altogether 110 mills of all classes in operation in 1923, as compared with 104 in 1922. If the net value of production for the entire industry be considered as the sum of the value of pulpwood exported, pulp made for export and paper manufactured, the total for 1923 will be \$188,642,109, as compared to \$158,483,377 for 1922, \$154,641,077 for 1921 and \$224,414,131 for 1920.

The total number of employees on salaries and wages in 1923 was 29,234 and their total payroll \$38,382,845. The capital invested in the industry increased from \$381,006,324 in 1922 to \$417,611,678 in 1923. The total cut of pulpwood in Canada in 1923 was 4,654,663 cords, valued at \$57,119,596, and of this total, 3,270,433 cords were used in Canadian pulp-mills, the remaining 1,384,230 cords, valued at \$13,525,004, being exported unmanufactured to the United States. In 1922 the total cut was 3,923,940 cords, of which 74 p.c. was consumed in Canada and 26 p.c. exported. No pulpwood is imported into Canada.

The exports of pulp during the calendar year 1923 were 875,358 tons, valued at \$47,027,496, as compared with 818,257 tons, valued at \$41,037,849, for 1922. Imports of pulp were 17,229 tons valued at \$947,225 for 1923 and 17,300 tons valued at \$1,008,527 for 1922. Exports of newsprint paper were 1,137,962 tons at \$85,611,258 for 1923 and 959,514 tons at \$68,362,817 for 1922. Details of the external trade in these commodities are given in Tables 12 and 13 for the calendar year 1923.

The United States market absorbs annually about four-fifths of Canada's pulp and paper shipments, and the remaining portion goes to the United Kingdom and widely distributed overseas markets. Two-thirds of the newsprint paper consumed in the United States is either of Canadian manufacture or is made from wood or wood-pulp imported from Canada.

12.—Imports and Exports of Wood Pulp by Countries, calendar year 1923.

Countries and Kinds of Pulp.	Quantity.	Value.
Imports—	Tons.	\$
From the United States.....	17,107	942,433
From other countries.....	122	4,792
Total wood pulp imported.....	17,229	947,225
Exports—		
To the United Kingdom.....	130,571	4,943,909
Mechanical pulp.....	99,851	3,308,927
Chemical fibre.....	30,720	1,634,982
To the United States.....	678,081	38,796,893
Mechanical pulp.....	216,957	7,522,477
Chemical fibre.....	461,124	31,274,416
To other countries.....	66,706	3,286,694
Mechanical pulp.....	24,298	767,919
Chemical fibre.....	42,408	2,518,775
Total wood pulp exported.....	875,358	47,027,496
Mechanical pulp.....	341,107	11,599,323
Chemical fibre.....	534,252	35,428,173

13.—Imports and Exports of Paper by Principal Countries, calendar year 1923.

Countries and Kinds of Paper.	Quantity.	Value.
Imports—	Tons.	\$
From the United Kingdom.....	—	975,027
From the United States.....	—	7,478,116
From other countries.....	—	659,753
Total paper and paper goods imported.....	—	9,112,896
Exports—		
To the United Kingdom.....	—	2,111,600
Newsprint.....	59	6,029
Wrapping.....	7,025	1,126,447
Boards.....	—	816,785
All other paper and paper goods.....	—	162,339
To the United States.....	—	86,625,488
Newsprint.....	1,115,355	83,827,081
Wrapping.....	1,612	165,404
Boards.....	—	2,193,678
All other paper and paper goods.....	—	439,325
To other countries.....	—	5,033,869
Newsprint.....	22,547	1,778,148
Wrapping.....	12,639	1,878,578
Boards.....	—	237,714
All other paper and paper goods.....	—	1,139,429
Total paper and paper goods exported.....	—	93,770,957
Newsprint.....	1,137,962	85,611,258
Wrapping.....	21,276	3,170,429
Boards.....	—	3,248,177
All other paper and paper goods.....	—	1,741,093

4.—Other Wood-Using Industries.

Saw-mills and pulp-mills are the two most important agents of secondary production among forest industries. They draw their supplies of raw material direct from the forest in the form of logs and pulpwood and produce sawn lumber, saw-mill by-products, pulp and paper. There are also a number of important industries which use these products as raw material for further manufacture. Some of them produce commodities made entirely of wood or wood pulp, others manufacture articles in which wood is the most important component and others produce articles in which wood is necessary but forms only a small proportion of the value. There

are, in addition, a number of industries which use wood indirectly in the manufacture of articles which do not contain wood as a component part. The first group includes the manufacture of paper products, sash, doors and other millwork and planing-mill products, boxes, baskets, cooperage and other containers, canoes, boats and small vessels, kitchen, baker's and dairy woodenware, wooden pumps, piping, tanks and silos, spools, handles, dowels and turnery. The second group includes the manufacture of furniture, vehicles and vehicle supplies, coffins and caskets, etc.

The third group, where wood has a secondary importance, includes the manufacture of agricultural implements, railway rolling stock, musical instruments, sporting goods, brooms and brushes, etc.

The fourth group could be said to include practically every form of industrial activity, as few, if any, of these are entirely independent of the use of wood, directly or indirectly.

The first two groups, wherein wood, wood pulp or paper is the chief or only component, were represented in Canada in 1922 by 3,957 establishments in which \$217,346,853 was invested. These industries employed 60,741 workers whose salaries and wages amounted to \$71,554,268. They used raw materials valued at \$81,178,081 in the manufacture of commodities valued at \$219,704,814.

5.—Total Annual Forest Utilization.

Table 14 gives the total value of primary and secondary forest production for 1920, 1921 and 1922. The first total includes primary production only, while the net figures include the value added by manufacturing logs and pulpwood into sawn lumber, pulp and other saw-mill and pulp-mill products.

It has been estimated that the total quantity of primary forest products in 1922 is equivalent to about 2,377,845,000 cubic feet of standing timber.

14.—Total Values of Primary and Secondary Forest Production, 1920-1922.

Items.	1920.	1921.	1922.
	\$	\$	\$
Firewood.....	36,262,151	37,468,330	38,228,702 ²
Ties.....	13,405,473	13,302,956	13,215,986
Poles.....	1,712,000	1,710,000	1,707,378
Posts.....	1,334,737	1,514,473	1,354,268 ²
Rails.....	376,690	468,417	450,133 ²
Mining timber.....	1	1,709,667	1,721,025
Wood distillation.....	1	563,774	479,299
Logs sawn.....	91,527,134	51,035,456	55,066,273
Pulpwood used.....	45,404,889	38,283,262	40,375,599
Miscellaneous products.....	1,755,391	1,012,982	850,078 ²
Square timber exported.....	1,899,444	1,699,530	1,492,344
Logs exported.....	1,836,315	2,117,097	3,270,575
Pulpwood exported.....	15,778,171	14,617,610	10,359,762
Miscellaneous exports.....	2,648,474	2,550,470	2,278,674
Total Primary Products.....	213,949,869	168,054,024	170,850,096
Net saw-mill products ³	100,718,055	59,648,505	53,612,563
Net pulpwood products ³	96,147,973	40,055,016	44,571,999
Net Total.....	410,806,897	267,757,545	269,034,658

¹Included under miscellaneous products.

²Estimates subject to revision.

The gross totals, including value of raw materials, were—

Saw-mills, 1920—\$192,245,189; 1921—\$106,162,128; 1922—\$106,150,894.

Pulp-mills, 1920—\$141,552,862; 1921—\$78,338,278; 1922—\$84,947,598.

The primary forest production during 1922 is shown by products in Table 15. The quantity reported in column 2, multiplied by the converting factor, gives the equivalent amount in standing timber as in column 4. Values are then given in column 5.

15.—Primary Forest Production by Products, 1922.

Products.	Unit Used.	Quantity reported or estimated.	Converting factor.	Equivalent volume in standing timber.	Total value.
			cu.ft.	cu.ft.	\$
Firewood.....	cords	8,860,846	95	841,780,560	38,228,702
Ties.....	number	14,558,063	12	174,696,756	13,215,986
Poles.....	"	436,899	13	5,679,687	1,707,378
Posts.....	"	13,848,569	2	27,697,138	1,354,268
Rails.....	"	5,265,325	2	10,530,650	450,133
Mining timber.....	M ft. b.m.	70,486	219	15,436,434	1,721,025
Wood distillation.....	cords	59,169	123	7,277,787	479,299
Logs sawn.....	M ft. b.m.	3,408,264	219	746,409,816	55,066,273
Pulpwood used.....	cords	2,912,608	117	340,775,136	40,375,599
Miscellaneous products.....	"	84,848	117	9,927,216	850,078
Square timber exported.....	M ft. b.m.	55,140	219	12,075,660	1,492,344
Logs exported.....	"	185,489	219	40,622,091	3,270,575
Pulpwood exported.....	cords	1,011,332	117	118,325,844	10,359,762
Miscellaneous exports.....	"	227,441	117	26,610,597	2,278,674
Total.....	—	—	—	2,377,845,182	170,850,096

7.—Forest Depletion and Increment.

Fire Losses.—No accurate summing-up of damage due to forest fires has ever been made for Canada, but it is estimated that 60 p.c. of the original forest has been burned, 13 p.c. has been cut for use and that 27 p.c. remains; moreover, that one-third as much mature timber has been burned in the last six years as has fallen to the axe.

The historic Miramichi fire, in 1825, burned along the valley of the Miramichi river in New Brunswick, and on a belt 80 miles long and 25 miles wide almost every living thing was killed. One hundred and sixty people perished, a thousand head of stock were killed, and a number of towns, including Newcastle, Chatham and Douglastown, were destroyed. The damage to the forest was not even estimated. Damage to other property was placed at \$300,000.

About 1845 vast areas were burned over west of lake Superior, many of them still remaining bare of tree-growth. Some years later a very extensive fire burned along the height-of-land from lake Timiskaming to Michipicoten and in 1871 another large fire swept over an area of more than two thousand square miles along the north shore of lake Superior from lake Nipissing to Port Arthur, completing a chain of desolation across the northern part of the province. About the same time the greater part of the Saguenay and Lake St. John district, in Quebec, was swept by one of the most destructive fires on record. Two other fires in 1891 and 1896 devastated over two thousand square miles of country in the southern Algoma district. In Quebec again, the country along the line of the Quebec and Lake St. John railway also suffered by a number of disastrous forest fires while millions of dollars worth of timber in the Ottawa country also fell a prey to the devouring element.

During more recent times, a series of disastrous fires swept over Northern Ontario. A number of isolated fires around the mining camp of Porcupine culminated on July 11, 1911, in a conflagration which resulted in the loss of 72 lives and property damage estimated at \$3,000,000. In 1916, fires in the same general region were responsible for the deaths of at least 224 people, the exact number never having been determined. During 1922, a third fire, covering in part the areas burned over by

the previous fires, destroyed the town of Haileybury and other centres and caused 40 deaths. In 1908, a fire originating in the forest around Fernie, British Columbia, destroyed that city, caused 25 deaths, rendered 6,000 people homeless and damaged property to the estimated extent of \$5,000,000. These are a few of the outstanding historical disasters. Every year thousands of acres are covered by fires of less individual importance, but which in the aggregate are rapidly depleting our forest resources. During the last five years 723,250 acres of merchantable timber have been burned over annually. At the low estimate of 5,000 feet board measure per acre, the amount of timber destroyed annually would be 3,616,250,000 feet board measure. In addition there were over 800,000 acres of young growth and 500,000 acres of cut-over land burned over, on which the increment of perhaps 30 years, on the average, was destroyed.

Speaking generally, there are two annual periods in Canada when the forest fire hazard is highest; in the spring, after the disappearance of the snow, when the forest floor is dry and the green underbrush has not yet developed, and again in the fall when the green growth is dead and the ground is covered with dry leaves. Statistics collected by the different government administrations and the Quebec protective associations show that over 95 p.c. of the fires of known origin are due to human carelessness and therefore preventable. Campers, settlers and railways are responsible for most of the fires whose origin is determined. Other causes, including lumbering operations and incendiarism, account for small proportions, and only a few are attributed to lightning.

Losses through Insects and Fungi.—During the last ten years the spruce bud-worm has caused tremendous damage to the spruce and balsam fir forests in eastern Canada. In Quebec, it is estimated that 100 million cords of pulpwood have been destroyed by this insect, and in New Brunswick the loss is placed at 15 million cords. Even though the active stage of the infestation is practically over, large amounts of timber continue to die every year as a result of previous defoliation. Other insects, though not as destructive as this one, entail a heavy drain on the forest. Though the attacks of fungi are more insidious, the loss caused by the various forms of rot and other fungous diseases is probably not less than that caused by insects under normal conditions. The butt rot in balsam fir is especially prevalent, and the value of the hardwoods also is greatly decreased on account of rot. Poplar and white birch seldom reach over 10 inches in diameter without considerable decay, and, since these species form such a large proportion of the young growth, the loss, though it has never been computed, must be very great.

Summary of Losses and Increment.—The annual consumption of standing timber for use amounts to about 2,400,000,000 cubic feet. At a very low estimate, fires destroy annually about 800,000,000 cubic feet of merchantable timber and the young growth on 1,300,000 acres. During the last ten years, the destruction occasioned by the spruce bud-worm has averaged 1,345,000,000 cubic feet per annum, besides the injury from bark-beetles and other insects. The loss due to fungi and windfall is not known, but is undoubtedly large. It may be safely estimated that the forests of Canada are being depleted at the rate of upwards of 5,000,000,000 cubic feet per annum. With about 534,000,000 acres of young, growing forest, an average annual increment of 10 cubic feet per acre would cover this depletion, but in view of the destruction of young growth which occurs and the deterioration of the forests and of the soil, caused by repeated fires, there is little hope that this increment is being produced at the present time throughout Canada, although particular areas are producing greatly in excess of this quantity.

IV.—THE FUR TRADE.

Historical Sketch.—The place which the fur trade held during the French régime in Canada, when for a century and a half it was at once the mainspring of discovery and development and the curse of settled industry, is familiar history. Later, the Hudson's Bay Company may be said with truth to have held the West until the Dominion had grown to absorb it, bequeathing to the civilization which came after, a native race accustomed to the white man and an example of organization and discipline that was of lasting influence. The salient facts in the story are as follows:

From the earliest times the Basque and Breton fishermen upon the "banks" had traded for furs. As the French court demanded more and more furs, adventurers came for the latter trade exclusively. Pont-Gravé and Chauvin built Tadousac in 1599 as a centre for this trade with the Indians of the Saguenay, and when trade routes were discovered further inland, the founding of Quebec and Montreal followed. The French Government from the first granted monopolies of the fur trade, always on the condition that the company should bring to Canada a stated number of settlers. But settlement and the fur trade could never go together—settlement by driving fur-bearing animals farther afield made trade increasingly expensive,—and the great profits of the fur trade, together with its freedom and romance, took all the adventurous from the rational pursuits of a settler. Trade spread west and south by the river routes, convoys bringing the furs yearly to Montreal and Quebec. The de Caen Company, in the seventeenth century, sent yearly to France from 15,000 to 20,000 pelts. "Beaver" was made the Canadian currency.

In the meantime, English navigators had been seeking a Northwest Passage to the Orient. By 1632 their efforts came to an end with little practical result. Hudson bay, however, had been accurately charted, so that when the first English fur-trading ships came some thirty years later, they sailed by charted routes to a safe harbour. The first expedition came at the instigation of Radisson and Groseilliers, two French *coureurs de bois* who had travelled in the rich fur country north of lake Superior. They had sought aid in France, but being repulsed turned to England. The charter of the "Adventurers of England trading into Hudson's Bay" was obtained in 1670 by Prince Rupert, who became first governor of the company (whence the name Rupert's Land). In 1676, merchandise costing £650 was sent to the bay and the furs got by barter sold in England for £19,500. The dividend on the stock of £10,500 was sometimes as high as 100 per cent. During the struggle with the French, beginning about 1685, no return was made, but with the English victory, the company resumed payments, usually amounting to 20 per cent per annum. Forts were built on Hudson bay and James bay at the mouths of rivers; the company, as monopolist, waited for the furs to be brought to its posts.

With the Seven Years' War, the fur trade from the south passed out of the hands of the French, and until 1771 the English were busy rediscovering the old French routes to the West. A period of open competition followed. The discoverer of a new fur district was soon followed by competitors who undersold him and were undersold by him until some or all were ruined and left for new fields. The Northwest Company, founded in 1783-4, was a result of such competition. No capital was deposited, but each party supplied a proportion of the articles needed for trade. The Northwest Company pursued a vigorous policy, founding posts to control all the best fur districts. The Hudson's Bay Company felt the keenness of the competition, and was forced to abandon its ancient policy of waiting for furs to be brought to the bay. By 1816, the rivals had absorbed or ruined eleven

other partnerships, and were themselves on the verge of ruin. Finally, in 1821, the two were joined under the name of the older company. The Northwest Company brought with it the control of the Pacific and Arctic watersheds, to be added to the lands draining into Hudson bay, and over the whole region the Hudson's Bay Company secured legal recognition of its monopoly of the fur trade. There followed forty years of great prosperity. The company's rights of exclusive trading in Indian territory expired in 1859, and ten years later it surrendered its other privileges. In return, Canada granted £300,000 to the company, as well as lands about its trading posts, and one-twentieth of the land in the fertile belt between the North Saskatchewan river and the United States boundary. The Hudson's Bay Company thereupon became a trading company, with no extraordinary privileges.

The Modern Industry.—Great changes have come over the trade in recent years. The railway has revolutionized conditions wherever its influence reaches. Steamboats now ply upon the larger lakes and rivers. Rising values have led to new processes of treatment and to the utilization of products once rejected. Competition has been encouraged, and new territory is eagerly sought as in the days prior to 1821. The modern opposition, though it ranges throughout Canada, has centred at Edmonton, on the edge of the great preserve. Winnipeg is now the chief collecting and distributing point of the Hudson's Bay Company, though Moose Factory is visited once a year, as formerly, by a vessel from London. Montreal collects the furs of the Ottawa valley and the Quebec hinterland, and receives the bulk of the supplies.

During the Great War, the important market changed from London to the United States, as is shown in the figures for the war years. Of the \$5,100,000 worth of undressed furs exported to England and the United States in 1914, England received \$3,000,000; in 1919, out of \$13,300,000 worth, only \$3,700,000 went to England. At the close of the war, Montreal took a position as an international fur market, holding the first Canadian fur auction sales in 1920, when 949,565 pelts, valued at \$5,057,114, were disposed of. Auction sales have also been held at Winnipeg and Edmonton. The Canadian fur market is now firmly established and sales are held two or three times a year.

Improved methods of capture, together with the advance of lumbering, mining and agricultural settlement have driven fur-bearing animals farther and farther afield. Close seasons have been declared for Russian sable and Bolivian chinchilla and Canadian beaver, but even this has been insufficient, as is shown by a continued decrease of the numbers of the animals. The fur trade has taken other methods to supply the demand by re-naming common and despised furs and by encouraging the use of the furs of domestic animals. About forty years ago, Persian lamb, astrachan and broadtail, the product of the Karakul sheep, came into general use. Several Karakul sheep farms are now established in Canada, the largest of which is situated in Alberta. Of fur-bearing wild animals in Canada, the fox has proved the most suited for domestication. The successful breeding of the fox on fur farms came in the period of rising prices after 1890, with the introduction of woven wire fencing. Other animals have been domesticated, though less successfully than the fox—raccoon, mink, marten, skunk, muskrat and beaver. For a review of the fur farming industry of Canada see pages 237 to 239.

Conservation.—The conservation of the wild life of Canada has been made a special object of government policy through the organization, in 1916, of the Advisory Board on Wild Life Protection, to co-ordinate the efforts of various

Departments and Branches of the Dominion Government in matters relating to the conservation of the wild life resources of Canada. The Northwest Game Act and the Migratory Birds Convention Act are the most important subjects to which the attention of the Board is specially directed and upon which it makes recommendations. In addition, the Board investigates and studies all problems relating to the protection and better utilization of all fur-bearing animals, "big game" mammals and to bird life, whether game birds, insectivorous birds or other. The Board serves entirely without remuneration and in the seven years of its existence it has incurred no expenditure.

In all provinces and territories of the Dominion, regulations governing the taking of fur-bearing animals are in force, and most kinds are protected during certain seasons of the year. In cases where special protection is necessary to avoid extermination of the species, the killing of the animals is prohibited for a period of years. Licenses are required to trade or traffic in furs and monthly and annual returns are made by the traders to the provincial authorities. Some of the provinces also impose a royalty on furs and require that all pelts must be stamped by a game guardian or other provincial officer.

Commencing with 1881, records of the value of production of raw furs in Canada were obtained in the decennial censuses. In 1880, the value of pelts is shown to have been \$987,555, and in 1910, to have been \$1,927,550. In 1920, the Dominion Bureau of Statistics commenced the annual collection of returns from fur traders, and for the season 1919-20, the value of pelts purchased from trappers and fur farmers is shown to have been \$21,387,005. This figure should not be taken as representative of the value of an average year's production, as abnormally high prices were paid for pelts during the early part of the season.

Present Production.—For 1920-21, the total fur production of Canada was valued at \$10,151,594, for 1921-22, at \$17,438,867, and for 1922-23, at \$16,761,567. For the calendar years 1922 and 1923, the value of the pelts sold from fur farms was \$598,607 and \$860,468; in both years the large item in the production was silver fox, which, being more valuable as well as more tractable, is more successfully bred. Statistics of the number and value of pelts produced are given by provinces in Table 1 for the years 1921-22 and 1922-23, while the number and value of pelts in 1922-23 and the average value per pelt in 1921-22 and 1922-23 are given by kinds in Table 2.

1.—Numbers and Values of Pelts Purchased by Traders from Trappers and Fur Farmers, years ended June 30, 1922 and 1923.

Provinces.	Number of Pelts.		Value of Pelts.	
	1921-22.	1922-23.	1921-22.	1922-23.
			\$	\$
Prince Edward Island.....	7,167	4,881	448,786	383,252
Nova Scotia.....	52,472	48,103	188,887	197,928
New Brunswick.....	52,214	39,861	162,421	157,636
Quebec.....	402,799	398,825	3,326,626	3,049,656
Ontario.....	1,101,556	838,249	4,959,492	3,616,692
Manitoba.....	643,299	701,091	1,690,278	1,673,667
Saskatchewan.....	798,066	1,462,288	1,679,812	2,242,937
Alberta.....	682,266	873,079	1,377,139	1,822,634
British Columbia.....	283,867	263,723	1,568,009	1,246,219
Yukon.....	69,796	46,198	203,402	199,522
Northwest Territories.....	273,288	287,698	1,834,015	2,171,424
Total for Canada.....	4,366,790	4,963,996	17,438,867	16,761,567

2.—Kind, Number, Total Value and Average Value of Pelts of Fur-bearing Animals taken in Canada, year ended June 30, 1923, with Comparative Average Values for the year ended June 30, 1922.

Kinds.	Number of pelts.	Total value of pelts.	Average value per pelt, 1922-23.	Average value per pelt, 1921-22.
Badger.....	2,900	\$ 3,553	\$ cts. 1 23	\$ cts. 1 04
Bear, black.....	6,423	63,820	9 94	10 81
Bear, brown.....	702	5,768	8 22	9 17
Bear, grey.....	18	129	7 17	-
Bear, grizzly.....	93	1,712	18 41	16 36
Bear, white.....	313	6,856	21 90	18 30
Bear, unspecified.....	225	3,375	-	12 00
Beaver.....	175,275	2,461,667	14 04	18 38
Coyote.....	32,998	353,807	10 72	9 07
Ermine (weasel).....	362,236	219,306	0 61	0 52
Fisher or pekan.....	3,976	277,667	69 84	74 45
Fox, cross.....	9,121	397,829	43 62	50 30
Fox, red.....	42,739	564,998	13 22	12 46
Fox, silver.....	6,865	774,348	112 80	147 42
Fox, blue.....	513	31,534	61 47	70 82
Fox, white.....	77,135	3,015,348	39 09	39 70
Fox, other.....	569	2,306	4 05	6 12
Lynx.....	17,317	332,061	19 18	20 38
Marten or sable.....	45,579	1,045,810	22 95	20 62
Mink.....	159,626	1,371,411	8 59	9 00
Muskrat.....	3,846,161	5,077,886	1 32	1 54
Otter.....	10,676	259,568	24 32	27 26
Rabbit.....	1,013	177	0 17	0 15
Raccoon.....	24,520	95,136	3 88	3 71
Skunk.....	117,840	236,081	2 00	2 35
Wild cat.....	1,129	3,781	3 35	4 16
Wolf.....	7,839	124,344	15 86	10 17
Wolverine or carcajou.....	1,027	16,057	15 63	17 54
Caribou.....	8	42	5 25	2 00
Deer.....	7,268	9,331	1 28	1 38
Elk.....	8	16	2 00	2 50
Moose.....	1,576	5,678	3 60	2 85
Panther.....	12	80	6 67	4 87
Civet cat.....	61	12	0 20	0 28
Domestic cat.....	235	73	0 31	0 25
Total for Canada.....	4,963,996	16,761,567	-	-

V.—FISHERIES.

1.—The Early Fisheries.

Fishing is one of the earliest and most historic industries of Canada. From a date which precedes authentic record, the Normans, the Bretons and the Basques were on the cod-banks of Newfoundland. Cabot, in 1498, when he first sighted the mainland of North America, gave it the name of "Bacalaos," the Basque word for codfish, which he found already in use among those hardy seamen. Cape Breton, one of the oldest place-names in America, is another memorial of the early French fishermen—and the Spaniards and the Portuguese were but little behind. Fernandez de Navarrete mentions all three as frequenters of the Grand Bank before 1502. The fishing was by hand lines over barrels made fast to the bulwarks to prevent fouling, the vessels remaining during fine weather, then returning to France with from 30,000 to 50,000 cod. Voyages along the coast soon showed the cod as plentiful inshore as on the outer banks, and it became common for a crew to anchor in a bay, erect a hut on shore, and make daily excursions to the fishing grounds—the product being salted and dried on land and at the end of the season shipped to France. Jacques Cartier, when he went up the St. Lawrence in 1534, found traces everywhere of these early "Captains Courageous" and of their rivalries in arms no less than in the capture of the teeming product which had tempted them so far from home. An establishment of the kind just mentioned was founded at Tadoussac by Chauvin in 1599. Soon the fishermen began to stay all winter and thus to erect permanent fishing settlements. Fishing, therefore, may well be regarded as the first industry to be systematically prosecuted by Europeans in what is today the Canadian domain. It has never since ceased to yield a perennial harvest both to Europe and America.

By the Treaty of Utrecht in 1713, Britain became the owner of Newfoundland and excluded France from fishing and drying fish on certain sections of the coast, but France retained the fisheries of Cape Breton and the gulf. The Seven Years' war (1756-1763) put a stop to continuous fishing. At its close, the Robin family of Jersey came to Canada, and gradually acquired the former French fishing stations. Until the arrival of the Loyalists, all other fishing but cod was neglected. Inshore fisheries alone (including those of the Labrador coast) were developed during this phase; no deep-sea fishing vessel put out from Lunenburg, now the chief centre of the deep-sea fishery, until 1873.

2.—The Canadian Fishing Grounds.

The fishing grounds of the Dominion of Canada are perhaps the most extensive in the world. On the Atlantic, from Grand Manan to Labrador, the coast line, not including the lesser bays and indentations, measures over 5,000 miles. The bay of Fundy, 8,000 square miles in extent, the gulf of St. Lawrence, fully ten times that size, and other ocean waters comprise not less than 200,000 square miles, or over four-fifths of the area of the fishing grounds of the North Atlantic. In addition there are on the Atlantic sea-board 15,000 square miles of inshore waters controlled entirely by the Dominion. Large as are these areas, they represent only a part of the fishing grounds of Canada. Hudson bay, with a shore 6,000 miles in length, is greater in area than the Mediterranean sea; the Pacific coast of the Dominion measures 7,180 miles in length and is exceptionally well sheltered; whilst throughout the interior is a series of lakes which together contain more than half

of the fresh water on the planet, Canada's share of the Great Lakes alone amounting to over 34,000 square miles, a total which of course does not include lake Winnipeg (9,457 square miles), lake Manitoba, and others of even greater area.

Still more important than the extent of the Canadian fishing grounds is the quality of their product. It is an axiom among authorities that food fishes improve in proportion to the purity and coldness of the waters in which they are taken. Judged by this standard, the Canadian cod, halibut, herring, mackerel, whitefish and salmon are the peer of any in the world. It is possible, therefore, to state that by far the most valuable fisheries of the western hemisphere, if not of the globe, belong to Canada.

It will be seen from the above that it is impossible to deal with the Canadian fisheries in the aggregate; they are those of a continent rather than of a country, and are of corresponding diversity. Omitting the tremendous Hudson bay and peri-Arctic region, which extends from Ungava to Alaska and is known to contain a number of valuable food fisheries in addition to its whaling grounds, there are roughly the following divisions of the Canadian fisheries.

Atlantic Fisheries.—These were the first Canadian fisheries in point of time, and until 1918 they remained the most important for aggregate value of product. Cod, halibut, haddock, hake, herring, mackerel, lobster, oyster, hair seal and white whale fisheries are included. The estuarian and inland waters of the Maritime Provinces and of Quebec are sometimes considered as distinct; if they are added, the list of products would embrace the salmon, the shad, the gaspereau (alewife), the smelt, the striped bass, the tom cod, the trout and the maskinonge. Conditions are fairly uniform throughout these fisheries, which are commonly divided into the inshore and deep-sea fisheries. The inshore or coastal fishery is carried on in small boats, usually motor driven, with crews of two or three men, and in small vessels with crews of from four to seven men. The means of capture employed by boat fishermen are gill nets and hooks and lines, both hand lines and trawls; whilst trap nets, haul seines and weirs are operated from the shore. Haddock as well as cod is a staple product; during the spring and summer it is split and salted, but the important season is the autumn, when the fish are shipped fresh or else smoked and sold as finnan haddie. The deep-sea fisheries are worked by vessels of from 40 to 100 tons, carrying from twelve to twenty men, operating with trawl lines from dories. The fleets operate on the various banks, such as Grand Bank, Middle Ground and Banquereau. The vessels, built by native hands, remain at sea sometimes for months at a time, and in the hands of sailors who have no superior, seldom come to grief. When they return, the fish, which have been split and salted on board, are taken ashore, washed and dried. The West Indies are the chief market for this product. No cod fish in the world stands the tropical climate like that cured by Nova Scotia fishermen. Steam trawling, as it is carried on in the North Sea, was introduced on the Atlantic coast of Canada several years ago. There are now several steam trawlers operating from Nova Scotia ports. They operate practically the whole year and their catches are utilized entirely for the fresh fish trade.

Lobstering is another distinctive industry. In 1870, there were three lobster canneries on the Atlantic coast of Canada; today the canneries number over 500 and give work to nearly 7,000 people; 30,000,000 lobsters is a normal catch. The difficulty of enforcing regulations as to the capture of undersized and spawning lobsters offers a constant problem in connection with the output, but a decline is now thought to have been arrested. Oysters, once plentiful everywhere, are now found in somewhat diminished quantities. The canning of sardines, which are

young herrings and not a distinct type of fish, in New Brunswick is second only to lobstering.

The fishing population of the Maritime Provinces is a specialized and stable industrial class. The coast fisheries are operated from April to November, or to January in sheltered districts; and though the larger vessels work all winter, several thousand men are available for a time each year for other employment. This they find about the small plots of land which most of them own or occupy, in the lumber camps of New Brunswick, or in the collieries of Nova Scotia. A few from Lunenburg and other centres engage in the West Indian trade. Apart from restrictions of weather and close seasons, the prevailing method of paying the men on shares has a further tendency in years of low catches or prices to drive them into secondary occupations.

In view of the various disabilities attaching to the industry, an Act of the Provincial Legislature of Nova Scotia was passed in 1905, which provided for the organization of fishermen's unions or "stations" throughout the province, in affiliation with a central body, to meet annually for the discussion of common problems such as transportation facilities, the cordage supply, prices, methods of catching and curing fish, etc. Several successful conventions were held. In New Brunswick similar legislation was enacted. After a few years' existence, however, the unions ceased to operate, and fishing activities are again prosecuted independently by the various individuals and firms interested.

Inland Fisheries.—The Great Lakes and tributary waters of the St. Lawrence are a second great division of the Canadian fisheries. Whitefish, trout, pickerel and lake herring are the most important commercial fishes of Ontario, though pike, sturgeon and coarse fish yield a fair return. The Quebec inland fisheries are comparatively unimportant. The story of the Great Lakes fisheries is one of reckless early depletion and subsequent slow recovery from restocking. Single hauls of 90,000 whitefish were once common; in the Detroit river the fish used to be driven into pens where they were captured or dried by the hundreds of thousands, and were used later as fertilizer. All this reaped its reward in barren waters and a demoralized market. The season on the Great Lakes lasts from six to eight months, and though fishing through the ice is followed by many, a large number depend on miscellaneous employment between the seasons. Moving westward, lake Winnipeg, lake Winnipegosis, lake Manitoba and the smaller lakes to the north and east furnish most of the fish products of Manitoba. Whitefish and pickerel are the chief products, but pike, tullibee, goldeye and many other varieties abound. In Saskatchewan and Alberta, commercial fishing is confined to the regions north of the Saskatchewan river, where whitefish in large quantities are taken. The problem of transportation is keenly felt; some of the greatest lakes of the continent—Reindeer, Athabaska, Great Slave, Great Bear—and hundreds of smaller bodies of water are still beyond reach from a marketing point of view. The lakes of the west, however, repeating the part which the St. Lawrence played in the days of the French *régime*, and the cod banks in the history of New England, have assisted greatly in the settlement of the country by providing a much needed food supply for early arrivals.

Pacific Fisheries.—In British Columbia there is an interior fishing region which corresponds in the main to the prairie section; in the early history of the province it is doubtful if the fur trade (which opened the door by way of the Rocky Mountains to later enterprise) could have established its footing but for these fisheries. The great wealth of British Columbia, however, in this respect—the

source from which she produces approximately two-fifths of the fish products of Canada, and has built up a trade which reaches to the ends of the earth—is the estuarine salmon fisheries of the Fraser, the Skeena, the Nass and other rivers of the Pacific slope. Every species of this king of food fishes (which, however, is not the true salmon) known to the waters of the Pacific, is to be found in the British Columbia coast waters—the sockeye, the spring, the coho, the pink and the chum salmon. Of these the sockeye is by far the most important, owing to its abundance and to its prevailing deep red colour and excellent texture, which have created so keen a demand for it in the British market. On the Fraser river, which used to be the chief source of supply, but which has now yielded place to the Skeena and other northern waters, the yield varies to a considerable extent from year to year. The run begins late in July and is at its height in the opening weeks of August, though the northern rivers have a somewhat earlier season. The spring or quinnat salmon is a much larger fish; it was the species first used in the United States for canning. The run begins early in the spring and continues until July. The cohoes are smaller, running like the sockeye in compact schools during September and October on the Fraser and earlier on the northern streams. The chum salmon is salted for export to the Orient. The pink salmon, again, follows the sockeye. Many of the employees in this fishery are Chinese, Japanese and Indians, the Chinese preponderating in the canneries and the Indians and Japanese in fishing operations.

Until recent years the other coastal fisheries of British Columbia were only slightly developed. Halibut abounds off Vancouver island and between the Queen Charlotte islands and the mainland, and though the first endeavour to establish an industry was unsuccessful, by 1903 British Columbia supplied 10,000,000 pounds of the 25,000,000 taken on the whole Pacific coast north of California. The former figure has since trebled. Similarly, the herring industry remained undeveloped until recently. There is also the whale fishery which has been organized in recent years with four stations, two on Vancouver island and two on the Queen Charlotte islands. In 1922 only one on Vancouver island and one on the Queen Charlotte islands were operated. The yearly catch of about 500 (455 in 1923) includes whales of many kinds—sulphur bottom, finback and humpback, with an occasional sperm whale. Whale hunting is carried on in fast boats with Svend Foyn harpoon guns—a method which was introduced from Norway. Every scrap of the whale is used—oil, whalebone and guano are its more important products. Black cod, oulachon, smelts, pilchards, sturgeon, shad and bass are also abundant in British Columbia waters.

A word might be added with regard to the fur-seal fisheries of the Pacific, whose historic headquarters were the city of Victoria. The industry has disappeared, in part through the scarcity of the animals, and in part through the workings of the Pelagic sealing treaty of 1911. The hair-seal fleets of the north Atlantic make St. John's, Newfoundland, their headquarters; a few Canadian vessels, however, clearing from Halifax, N.S., take fur-seals off the Falkland islands.

Game Fish.—The above is a purely industrial and commercial survey. Fishing for sport, however, has its economic side in a country of such famous game fish as the salmon of the Restigouche, the black bass of the Quebec and Ontario highlands, and the trout of the Nipigon. A considerable public revenue is derived from the leasing of waters in sparsely settled districts to clubs and individuals for sporting purposes. Several hundred guides find employment here during the summer months.

3.—The Government and the Fisheries.

Upon the organization of the Government at Confederation, the administration of the Canadian fisheries and marine was placed in the charge of a Department of the Dominion Government which then exercised complete jurisdiction over the fisheries, under the supervision of a Cabinet Minister, with a large staff of inspectors, overseers and guardians to enforce the fishery laws. The annual expenditure of the Dominion on the fisheries is now about \$1,500,000 and its revenue about \$350,000. In 1882, 1898, 1913 and 1920, decisions in the courts considerably altered the status of jurisdiction as between the Dominion and the provinces. Today the Dominion controls the tidal fisheries of the Maritime Provinces and British Columbia and the fisheries of the three Prairie Provinces. The non-tidal fisheries of the Maritime Provinces and Ontario and both the tidal and non-tidal fisheries of Quebec are controlled by the respective provinces, but the right of fisheries legislation for all provinces rests with the Dominion Government.

Conservation.—River and lake fisheries certainly, and sea fisheries probably, if left to themselves, conform to the economic law of diminishing returns. The Canadian Government, accordingly, has had for a main object the prevention of depletion, the enforcement of close seasons, the forbidding of obstructions and pollutions, and the regulation of nets, gear and of fishing operations generally. In addition, an extensive system of fish culture has been organized, the Dominion at present operating 52 hatcheries at a yearly cost of about \$350,000, and producing about 1,000,000,000 eggs, fry or older fish per annum, mostly B.C. salmon and whitefish. The young fish are distributed gratis if the waters applied for are suitable.

Scientific Research.—Stations under the direction of the Biological Board of Canada for the conduct of biological research into the numerous complex problems furnished by the fisheries are established at St. Andrews, N.B., and Nanaimo, B.C. Toronto, McGill, Queen's, Manitoba, British Columbia and the chief Maritime Province universities send workers to both stations, chiefly professors and trained specialists. The life-histories of edible fishes, the bacteriology of fresh and cured fish, improved methods of handling and preparing fish, and numerous other practical problems have been taken up and scientific memoirs and reports issued.

Direct Assistance.—For the rest, the action of the Government has been in the way of rendering direct assistance in specific cases of difficulty. Experimental reduction plants were operated for some years to encourage the capture of dog-fish. For several years also, an expert was engaged to conduct a series of demonstrations in the Scottish method of curing herring, with a view to improving the Canadian cured product. A quarterly bulletin on the sea fisheries is issued for the benefit of the trade. Finally, a fleet of armed cruisers patrols the coastal and inland waters for the prevention of poaching and the enforcement of regulations.

During the war it became desirable to increase as far as possible the consumption of fish, reserving the less perishable animal foods for export to our allies. The government, therefore, undertook to provide for the rapid transit of sea fish on its railway lines to the markets of the inland provinces, and to stimulate by a publicity campaign the consumption of fish. Though much was accomplished in this direction, the annual per capita consumption of fish in Canada is now estimated by the Fisheries Branch at not more than 20 pounds, a low figure considering Canada's position as a fish-producing country.

International Problems.—The chief international fisheries problem is the question of the rights of the United States, whose fishermen were granted, by the Treaty of Versailles, certain privileges in the Canadian inshore fisheries. Losing

these by the war of 1812, the United States after 1818 surrendered all but their liberty to call at Canadian ports for shelter, wood, water, or to make repairs, and to fish around the Magdalen islands and on the north shore of the gulf of St. Lawrence from Point Joli eastward, and to dry and cure their fish in any of the unsettled bays on this portion of the north shore. In the years 1854-1866, the Reciprocity Treaty set at rest questions of interpretations to be placed on certain parts of the Treaty of 1818. The former treaty provided for the free admission into either country of the fish products of the other, and the fishermen of each country were allowed to fish in Atlantic territorial waters of the other, with the exception of specified rivers and other grounds.

In 1871, the Treaty of Washington revived the fishery provisions of the Reciprocity Treaty of 1854, and provided for a commission to determine the compensation to be paid by the United States to Great Britain as the difference in the value of the concessions mutually granted. This commission sat at Halifax in 1877, handing down the "Halifax Award," the amount of which was \$5,500,000. In 1885, however, the United States terminated the fisheries articles of this treaty, and a period of disagreement followed. A settlement was negotiated in 1888, when the plenipotentiaries of the two nations agreed to the "Unratified Treaty of 1888," under which United States fishing vessels were granted, without fee, annual licenses authorizing them to purchase provisions and outfits in Canadian ports, to trans-ship catches and to ship crews. Out of this treaty grew the so-called *modus vivendi* licenses. Since it was recognized that the treaty could not receive official sanction before the commencement of the fishing season, it was agreed that United States fishing vessels, on paying \$1.50 per registered ton, should receive annual licenses conveying the above privileges. The treaty was rejected by the United States Senate, but Canada continued to issue *modus vivendi* licenses up to 1918, when arrangements were made for reciprocal privileges in the ports of either country. The arrangement was discontinued in the United States on July 1, 1921. The following year the *modus vivendi* licenses were revived in Canada; but the system was terminated on Dec. 31, 1923, and United States fishing vessels are now limited to the provisions of the Treaty of 1818.

On the Great Lakes, also, the more important fishery problems, such as restocking and marketing, are necessarily international in character, and are complicated by the number of state governments interested. Much the same situation has developed in British Columbia, where the sockeye of the Fraser are taken by the canners of Puget sound in quantities that largely exceed the catch of the Canadian canners, and by trap nets and other methods forbidden in Canadian waters. In 1906 an international commission first discussed the question, while in 1922, prohibition of sockeye fishing in the Fraser for 5 years, with a view to conservation, was recommended by a Parliamentary commission.

Fishing Bounties.—An important though indirect aftermath of the Washington Treaty remains. By an Act of 1882 (45 Vict., c. 18) for the development of the sea fisheries and the encouragement of boat-building, provision was made for the distribution annually among fishermen and the owners of fishing boats of \$150,000 in bounties, representing the interest on the amount of the Halifax award. An Act of 1891 (54-55 Vict., c. 42) increased the amount to \$160,000, the details of the expenditure being settled each year by Order in Council. For the year 1923, payment was made on the following basis: to owners of vessels entitled to receive bounty, \$1 per registered ton, payment to the owner of any one vessel not to exceed \$80; to vessel fishermen entitled to receive bounty, \$9 each; to owners of boats measuring

not less than 13 feet keel, \$1 per boat; to boat fishermen entitled to receive bounty, \$7.60 each. The claims paid numbered 8,917, compared with 9,664 paid in the previous year. The total amount paid in 1923 was \$159,917. Details of the distribution of bounties for the years 1920 to 1923 are as follows:—

1.—Government Bounties paid to Fishermen in the fiscal years 1920-1923.

Provinces.	Number of men who received bounties.				Amounts of bounties paid.			
	1920.	1921.	1922.	1923.	1920.	1921.	1922.	1923.
	No.	No.	No.	No.	\$	\$	\$	\$
Prince Edward Island.....	1,187	1,562	1,278	1,262	8,110	9,413	7,704	10,154
Nova Scotia.....	11,289	12,507	12,823	9,577	93,873	91,410	93,254	91,262
New Brunswick.....	1,544	1,948	2,095	1,556	13,774	14,640	16,311	16,123
Quebec.....	5,560	7,384	6,781	5,345	36,762	43,986	39,903	42,378
Total.....	19,580	23,401	22,977	17,740	152,519	159,449	157,172	159,917

4.—The Modern Fishing Industry.

The existing fishing industry of Canada is in the main the growth of the past half century. In 1844, the estimated value of the catch was only \$125,000. It doubled in the following decade, and by 1860 had well passed the \$1,000,000 mark. Ten years later it was \$6,000,000, and this was again more than doubled by 1878. In the 90's it passed \$20,000,000, and in 1911, \$34,000,000. The highest record was reached in 1918, with over \$60,000,000. (It will be understood that these figures represent the total values of fish marketed, whether in a fresh, dried, canned or otherwise prepared state.) Meanwhile the number of employees had mounted to over 80,000, and the total capital invested to over \$50,000,000 in certain years, though the industry as a whole did not progress proportionately with the marked industrial expansion which set in after 1896 in Canada.

Among individual fish products, the cod and the salmon long disputed the primacy; if the record back to the beginning is taken, the cod is the most valuable fishery; in the past fifteen years, however, the salmon has definitely taken the lead, and the heavy pack and high price of lobsters have more than once sent cod down to third place. In 1923, halibut had second place in order of value, with lobsters third and cod fourth. This has, of course, affected the relative standing of the provinces accordingly, British Columbia now occupying the leadership that in earlier times belonged to Nova Scotia. The yearly record of production since 1870, the total production by provinces for the past five years and the record by principal fish products for the past five years in descending order of importance are shown in Tables 2, 3 and 4.

2.—Total Value of the Fisheries of Canada in the fiscal years 1870-1923.

Years.	Value.	Years.	Value.	Years.	Value.	Years.	Value.
	\$		\$		\$		\$
1870.....	6,577,391	1884.....	17,766,404	1898.....	19,667,121	1912-13....	33,389,464
1871.....	7,573,199	1885.....	17,722,973	1899.....	21,891,706	1913-14....	33,207,748
1872.....	9,570,116	1886.....	18,679,288	1900.....	21,557,639	1914-15....	31,264,631
1873.....	10,754,997	1887.....	18,386,103	1901.....	25,737,153	1915-16....	35,860,708
1874.....	11,681,886	1888.....	17,418,510	1902.....	21,959,433	1916-17....	39,208,378
1875.....	10,350,385	1889.....	17,665,256	1903.....	23,101,878	1917.....	52,312,044
1876.....	11,117,000	1890.....	17,714,902	1904.....	23,516,439	1918.....	60,250,544
1877.....	12,005,934	1891.....	18,977,878	1905.....	29,479,562	1919.....	56,508,479
1878.....	13,215,678	1892.....	18,941,171	1906.....	26,279,485	1920.....	49,241,339
1879.....	13,529,254	1893.....	20,686,661	1907-08....	25,499,349	1921.....	34,931,935
1880.....	14,499,979	1894.....	20,719,573	1908-09....	25,451,085	1922.....	41,800,210
1881.....	15,817,162	1895.....	20,199,338	1909-10....	29,629,167	1923.....	42,565,545
1882.....	16,824,092	1896.....	20,407,425	1910-11....	29,965,433		
1883.....	16,958,192	1897.....	22,783,546	1911-12....	34,667,872		

¹ Calendar year.

3.—Total Value of Fisheries, by Provinces, in the calendar years 1919-1923.

Provinces.	1919.	1920.	1921.	1922.	1923.
	\$	\$	\$	\$	\$
Prince Edward Island.....	1,536,844	1,708,723	924,529	1,612,599	1,754,980
Nova Scotia.....	15,171,929	12,742,659	9,778,623	10,209,258	8,448,385
New Brunswick.....	4,979,574	4,423,745	3,690,726	4,685,660	4,548,535
Quebec.....	4,258,731	2,592,382	1,815,284	2,089,414	2,100,412
Ontario.....	3,410,750	3,336,412	3,065,042	2,858,122	3,159,427
Manitoba.....	1,031,117	1,249,607	1,023,187	908,816	1,020,595
Saskatchewan.....	475,797	296,472	243,018	245,337	286,643
Alberta.....	333,330	529,078	408,868	331,239	438,737
British Columbia.....	25,301,607	22,329,161	13,953,670	18,849,658	20,795,914
Yukon.....	8,800	33,100	28,988	10,107	11,917
Total for Canada.....	56,508,479	49,241,339	34,931,935	41,800,210	42,565,545

4.—Quantity¹ and Value² of Chief Commercial Fishes, 1919-1923.

Kinds of Fish.	1919.	1920.	1921.	1922.	1923.	Increase or decrease, 1923 compared with 1922, inc. +, dec. -.
Salmon..... cwt.	1,688,653	1,284,729	878,124	1,547,099	1,561,738	+ 14,639
Halibut..... cwt.	17,889,913	15,595,970	9,305,763	13,593,414	12,534,515	-1,058,899
Lobsters..... cwt.	243,449	262,726	357,450	323,902	354,325	+ 30,423
Cod..... cwt.	5,119,842	4,535,188	4,112,942	4,342,526	6,596,452	+2,253,926
Herring..... cwt.	345,806	399,985	393,625	363,925	381,628	+ 17,703
Whitefish..... cwt.	5,338,343	7,152,455	5,143,403	5,950,450	6,365,362	+ 408,912
Haddock..... cwt.	2,006,770	1,982,706	2,053,699	2,348,398	1,801,757	- 546,641
Sardines..... brl.	9,987,612	6,270,171	4,594,970	5,377,020	4,079,397	-1,297,623
Pickrel..... cwt.	1,573,986	2,072,723	1,662,135	1,854,050	1,841,062	- 12,988
Smelts..... cwt.	3,347,080	3,428,298	2,227,801	2,084,197	2,659,804	+ 575,607
Trout..... cwt.	197,403	181,764	184,072	158,781	157,788	- 993
Mackerel..... cwt.	1,849,741	2,015,299	1,916,698	1,485,567	1,629,143	+ 143,576
Clams and quahaugs.. brl.	564,574	441,745	269,222	307,733	304,565	- 3,168
Pike..... cwt.	2,048,746	1,522,680	899,629	952,533	1,046,808	+ 94,275
Perch..... cwt.	214,525	196,649	152,471	244,703	134,561	- 110,142
Sturgeon..... cwt.	830,074	860,268	646,463	708,381	1,016,810	+ 308,429
Swordfish..... cwt.	61,727	61,883	64,854	83,149	103,869	+ 20,720
Shad..... cwt.	582,744	631,483	619,570	741,000	909,471	+ 168,471
Salmon..... cwt.	75,271	58,118	84,597	83,268	65,254	- 18,014
Trout..... cwt.	835,195	789,361	835,393	934,608	868,629	- 65,979
Mackerel..... cwt.	68,670	55,763	61,348	70,806	68,232	- 2,574
Clams and quahaugs.. brl.	862,966	708,633	745,014	775,976	823,767	+ 47,791
Pike..... cwt.	229,877	142,347	145,544	251,478	141,749	- 109,729
Perch..... cwt.	2,035,849	1,126,703	1,124,679	1,500,357	617,978	- 882,379
Sturgeon..... cwt.	36,446	26,143	31,587	40,435	44,040	+ 3,605
Shad..... cwt.	160,125	147,409	171,623	190,860	215,826	+ 24,966
Swordfish..... cwt.	58,163	43,691	40,563	39,325	43,674	+ 4,349
Trout..... cwt.	327,675	264,896	175,987	174,233	197,024	+ 22,791
Mackerel..... cwt.	18,547	20,976	27,481	27,194	31,049	+ 3,855
Shad..... cwt.	185,257	206,685	169,552	153,926	184,240	+ 30,314
Pickrel, blue..... cwt.	23,917	33,795	64,059	63,585	32,547	- 31,038
Sturgeon..... cwt.	167,419	236,565	192,177	260,699	179,011	- 81,688
Swordfish..... cwt.	4,090	3,373	3,236	3,687	5,431	+ 1,744
Shad..... cwt.	71,777	62,983	93,864	97,778	176,619	+ 78,841
Oysters..... brl.	7,411	3,351	6,851	11,164	14,343	+ 3,179
Hake and cusk..... cwt.	97,945	51,104	96,413	102,789	155,020	+ 52,231
Black cod..... cwt.	14,565	14,526	18,823	19,427	22,949	+ 3,522
Tullibee..... cwt.	153,276	146,863	126,686	144,082	152,776	+ 8,694
Pollock..... cwt.	244,749	175,719	102,066	262,660	93,520	- 169,140
Shad..... cwt.	645,570	361,446	145,400	376,953	143,578	- 233,375
Trout..... cwt.	10,527	25,783	20,317	19,013	16,679	- 2,334
Mackerel..... cwt.	116,580	181,202	142,558	119,026	136,492	+ 17,466
Shad..... cwt.	49,457	38,588	62,395	45,423	23,785	- 21,638
Pickrel..... cwt.	268,099	246,319	212,563	153,414	127,661	- 25,753
Pollock..... cwt.	227,963	141,302	134,407	154,693	71,249	- 83,444
Shad..... cwt.	602,264	295,102	172,822	199,994	105,616	- 94,378

¹ Caught and landed. ² Marketed.

Operations in 1923—Detailed Record of Production.—The total value of the products of the Canadian fishing industry in the calendar year 1923 was \$42,565,545, compared with \$41,800,210 for 1922 and \$34,931,935 for 1921. (The value of the fish at the vessel's or boat's side was \$26,441,408.) In Tables 5 and 6 will be found a detailed statement for the whole of Canada of each fish product marketed, with comparative figures for the preceding year—Table 5 dealing with sea-fish and Table 6 with products of the inland fisheries. In Table 7, an analysis is made of the change in the value of each product from the preceding year due to variations in price and quantity respectively. It will be seen that the largest items of decrease in quantity were lobsters, halibut, whitefish and tullibee, whilst on the other hand large increases are shown for salmon, cod, mackerel, sardines and herring. Lower prices were noted in the majority of cases. In Tables 8 and 9 the number and operations of the fish-canning and curing establishments are shown.

5.—Quantities and Values of Sea Fish Marketed during the calendar years 1922 and 1923.

Kinds of Fish.		1922.		1923.	
		Quantity.	Value.	Quantity.	Value.
			\$		\$
Cod, used fresh.....	cwt.	125,391	508,689	125,190	554,311
“ green-salted.....	“	159,814	611,931	118,984	487,011
“ smoked fillets.....	“	15,503	166,372	20,458	226,501
“ smoked.....	“	5,862	64,514	10,829	110,106
“ dried.....	“	588,028	3,742,986	423,019	2,395,115
“ boneless.....	“	25,905	256,849	27,491	290,883
“ canned.....	cases	3,076	25,589	1,935	15,470
“ roe.....	cwt.	—	—	—	—
“ liver oil, medicinal.....	gal.	126	90	2,352	1,464
Haddock, used fresh.....	cwt.	116,479	406,184	136,963	491,584
“ canned.....	cases	6,069	47,253	5,353	36,008
“ smoked.....	cwt.	49,398	384,865	48,306	402,370
“ smoked fillets.....	“	—	—	3,621	40,469
“ boneless.....	“	464	4,192	603	5,689
“ green-salted.....	“	15,140	36,435	6,722	20,835
“ dried.....	“	16,334	73,604	12,959	49,873
Haik and cusk, used fresh.....	cwt.	2,960	5,314	8,906	9,917
“ canned.....	cases	—	—	367	2,569
“ green-salted.....	cwt.	50,998	113,167	12,648	31,685
“ smoked.....	“	—	—	—	—
“ smoked fillets.....	“	5,778	51,457	3,984	32,875
“ dried.....	“	42,861	187,640	14,571	57,715
“ boneless.....	“	2,415	19,375	1,074	8,817
Pollock, used fresh.....	cwt.	6,632	13,076	5,288	14,030
“ green-salted.....	“	34,335	76,217	14,978	40,012
“ smoked fillets.....	“	—	—	128	1,408
“ dried.....	“	26,064	110,701	12,021	50,166
Whiting, used fresh.....	cwt.	116	812	96	396
“ smoked.....	“	20	200	—	—
Halibut, used fresh.....	cwt.	323,436	4,339,248	354,073	6,593,917
“ smoked.....	“	46	725	122	2,196
“ smoked fillets.....	“	—	—	—	—
“ canned.....	cases	240	2,553	33	339
Flounders, brill, plaice, etc., used fresh.....	cwt.	6,574	31,264	7,430	31,086
Skates, used fresh.....	cwt.	773	3,548	1,701	5,803
Soles, used fresh.....	cwt.	9,485	60,100	3,675	28,757
Herring, used fresh.....	cwt.	61,533	143,444	78,781	155,924
“ boneless.....	“	118	2,210	340	5,100
“ canned.....	cases	2,114	11,427	3,630	18,499
“ smoked.....	cwt.	70,036	283,480	51,541	260,561
“ dry-salted.....	“	522,768	650,286	744,036	1,087,966
“ pickled.....	brl.	29,927	165,297	24,457	144,938
“ used as bait.....	“	231,508	443,977	191,757	409,477
“ fertilizer.....	“	64,870	50,582	78,380	77,835
“ scales.....	cwt.	3,000	15,000	70	350
Mackerel, used fresh.....	cwt.	145,785	1,043,282	75,943	429,295
“ canned.....	cases	584	4,199	54	270
“ smoked.....	cwt.	—	—	19	199
“ salted.....	brl.	34,814	452,660	21,988	188,214
“ roe.....	cwt.	27	216	—	—

5.—Quantities and Values of Sea Fish Marketed during the calendar years 1922 and 1923—continued.

Kinds of Fish.	1922.		1923.	
	Quantity.	Value.	Quantity.	Value.
		\$		\$
Sardines, canned..... cases	121,800	445,100	140,000	700,000
“ sold fresh and salted..... brl.	215,500	263,281	106,561	316,810
Pilchards, used fresh..... cwt.	—	—	5	35
“ canned..... cases	19,186	98,082	17,195	82,518
“ salted..... brl.	—	—	—	—
“ dry-salted..... cwt.	—	—	128	154
“ used as bait..... brl.	3,125	7,154	3,625	9,129
“ smoked..... cwt.	117	819	20	200
Alewives, used fresh..... cwt.	15,491	31,484	14,663	26,476
“ salted..... brl.	10,977	56,709	10,848	42,441
“ smoked..... cwt.	3,089	19,338	2,101	10,312
Bass, used fresh..... cwt.	529	4,422	634	6,956
Perch, used fresh..... “	1,963	16,874	1,745	12,704
Salmon, used fresh..... “	285,631	2,682,219	269,917	2,658,097
“ canned..... cases	1,290,584	10,078,634	1,342,909	9,245,018
“ smoked..... cwt.	1,325	18,829	470	8,425
“ dry-salted..... “	96,671	287,749	103,116	284,016
“ mild cured..... “	27,691	466,767	14,624	278,520
“ pickled..... “	5,085	27,054	2,414	17,079
“ used as bait..... brl.	—	—	2,400	9,695
“ roe..... cwt.	—	—	1,619	8,817
Shad, used fresh..... “	1,217	15,664	2,997	29,865
“ salted..... brl.	84	4,274	135	5,740
Smelts, used fresh..... cwt.	82,480	931,557	64,327	865,042
Sturgeon, used fresh..... “	333	6,587	642	12,132
“ caviar..... lb.	—	—	—	—
Trout, used fresh..... cwt.	851	10,517	1,060	17,759
“ canned..... cases	—	—	28	175
Black cod, used fresh..... cwt.	6,709	46,327	9,477	77,332
“ green-salted..... “	68	690	7	91
“ smoked..... “	5,638	69,053	3,594	59,069
“ dried..... “	295	2,956	—	—
Red cod, etc., used fresh..... “	3,573	22,994	2,811	15,924
“ smoked..... “	55	485	109	1,635
Albacore, used fresh..... “	2,451	10,209	3,310	9,659
Caplin, used fresh..... brl.	6,360	12,702	7,135	8,621
Eels, used fresh..... cwt.	1,434	12,960	1,114	8,781
Greyfish, exported..... “	40,240	10,085	1	1
Octopus, used fresh..... “	394	3,297	679	4,848
Oulachons, used fresh..... “	179	1,212	438	2,255
Squid, used as bait..... brl.	6,671	12,991	8,480	36,458
Swordfish, used fresh..... cwt.	11,164	102,789	14,343	155,020
Tom cod, used fresh..... “	14,017	33,208	11,707	33,800
Mixed fish, used fresh..... “	1,130	895	695	635
Abalone, canned..... cases	150	1,500	—	—
Shell Fish—				
Clams and quahaugs, used fresh..... brl.	17,350	53,463	25,680	111,900
“ canned..... cases	23,085	137,397	18,329	103,926
“ chowder..... “	—	—	—	—
Cockles, used fresh..... cwt.	181	555	—	—
Crabs, used fresh..... “	6,455	39,850	6,897	45,217
“ canned..... cases	1,035	20,835	738	16,265
“ paste..... “	8	80	—	—
Lobsters, in shell..... cwt.	67,499	1,413,600	79,899	1,792,154
“ canned..... cases	148,644	4,522,985	151,039	4,560,685
“ tomalley..... “	1,494	19,865	1,227	12,523
Mussels, used fresh..... cwt.	161	115	132	113
Oysters, used fresh..... brl.	19,427	144,082	22,949	152,776
Scallops, shelled..... gal.	21,054	61,242	27,466	83,705
“ canned..... cases	173	2,561	125	1,500
Shrimps, used fresh..... cwt.	471	8,201	1,422	26,004
Winkles, used fresh..... “	4,222	9,786	1,728	5,205
Dulse, dried..... “	80	560	1,145	12,800
Tongues and sounds, pickled or dried..... cwt.	934	4,108	405	2,792
Sealskins, fur..... No.	930	18,600	4,424	78,475
“ hair..... “	3,642	9,383	2,964	7,669
Porpoise skins..... “	—	—	3	30

**5.—Quantities and Values of Sea Fish Marketed during the calendar years
1922 and 1923—concluded.**

Kinds of Fish.	1922.		1923.	
	Quantity.	Value.	Quantity.	Value.
		\$		\$
Whale meat, canned..... cases	—	—	9,119	36,476
Whalebone and meal..... ton	326	15,060	485	12,625
Whale fertilizer..... " "	230	13,800	910	36,400
Cod liver oil, crude ² gal.	—	—	111,643	36,513
Seal oil..... " "	10,118	2,651	7,764	3,313
Porpoise oil..... " "	—	—	87	27
Whale oil..... " "	284,814	130,629	706,614	247,320
Fish oil..... " "	324,682	102,601	211,245	78,583
Fish glue..... " "	280	54	266	135
Fish meal..... ton	633	34,270	523	31,087
Fish fertilizer..... " "	620	23,102	590	17,420
Fish bones..... cwt.	2,322	4,862	7,746	11,274
Fish skins..... " "				
Fish offal..... ton	—	—	890	1,464
Total.....	—	37,222,774	—	37,401,604

¹ Used in the production of fish oil and fertilizer in 1923.

² Included with fish oil in 1922.

**6.—Quantities and Values of Inland Fish Marketed during the calendar years
1922 and 1923.**

Kinds of Fish.	1922.		1923.	
	Quantity.	Value.	Quantity.	Value.
		\$		\$
Alewives, fresh..... cwt.	122	305	176	440
" salted..... brl.	292	2,628	233	1,748
Bass..... cwt.	209	2,458	131	1,583
Carp..... " "	10,604	42,406	11,333	39,666
Caplin..... " "	—	—	—	—
Catfish..... " "	4,610	34,157	4,943	52,344
Eels..... " "	11,710	80,498	13,753	91,067
Goldeyes, fresh..... " "	1,793	8,195	1,404	5,858
" smoked..... " "	1,047	18,846	2,363	38,143
Herring, fresh..... " "	80,426	316,316	112,025	498,157
" salted..... brl.	363	2,178	299	1,347
Maskinonge..... cwt.	21	283	52	700
Mixed fish..... " "	50,112	194,721	52,288	186,603
Mullets..... " "	7,645	23,273	8,749	23,932
Perch..... " "	25,231	137,052	29,304	171,536
Pickarel, doré..... " "	83,149	741,000	103,860	900,471
Pickarel (blue)..... " "	63,585	260,699	32,547	179,011
Pike..... " "	39,325	174,233	43,674	197,024
Porpoise..... No.	—	—	—	—
Salmon..... cwt.	1,687	32,162	1,416	29,848
Sardines..... brl.	—	—	—	—
Shad..... cwt.	1,224	7,344	792	4,752
Smelts..... " "	788	3,051	927	3,587
Sturgeon..... " "	3,354	84,684	4,789	152,900
" caviar..... lb.	3,833	6,507	6,460	11,587
" bladders..... No.	—	—	—	—
Trout, fresh..... cwt.	69,215	760,036	66,695	802,179
" salted..... " "	493	5,423	299	3,654
" canned..... cases	—	—	—	—
Tullibee, fresh..... cwt.	45,423	153,414	23,779	127,541
" smoked..... " "	—	—	3	120
Whitefish, fresh..... " "	158,579	1,484,419	157,697	1,628,342
" salted..... " "	114	1,128	61	801
" smoked..... " "	2	20	—	—
" canned..... cases	—	—	—	—
Total.....	—	4,577,436	—	5,163,941

7.—Yield of the Fisheries of Canada, compared as to Quantity and Value, for 1921 and 1922. ("000" omitted).

Kinds of Fish.	Actual value, 1922.	Value at prices of 1921.	Actual value, 1921.	Increase (+) or decrease (-).	Due to higher (+) or lower (-) prices.	Due to larger (+) or smaller (-) quantities.
	\$	\$	\$	\$	\$	\$
Salmon.....	13,593	16,395	9,306	+ 4,287	- 2,802	+ 7,089
Lobsters.....	5,956	4,756	5,143	+ 813	+ 1,200	+ 387
Cod.....	5,377	5,306	4,595	+ 782	+ 71	+ 711
Halibut.....	4,343	3,727	4,113	+ 230	+ 616	+ 386
Herring.....	2,084	2,485	2,228	- 144	- 401	+ 257
Mackerel.....	1,500	1,943	1,124	+ 376	- 443	+ 819
Whitefish.....	1,486	1,654	1,917	- 431	- 168	- 263
Pickrel.....	1,002	924	812	+ 190	+ 78	+ 112
Haddock.....	953	1,028	900	+ 53	- 75	+ 128
Smelts.....	934	822	835	+ 99	+ 112	+ 13
Trout.....	776	860	745	+ 31	- 84	+ 115
Sardines.....	708	1,037	646	+ 62	- 329	+ 391
Hake and cusk.....	377	374	145	+ 232	+ 3	+ 229
Pollock.....	200	199	173	+ 27	+ 1	+ 26
Clams and quahaugs.....	191	219	172	+ 19	- 28	+ 47
Pike.....	174	170	176	- 2	+ 4	- 6
Perch.....	154	167	170	- 16	- 13	- 3
Tullibee.....	153	154	212	- 59	- 1	- 58
Oysters.....	144	130	127	+ 17	+ 14	+ 3
Black cod.....	119	133	142	- 23	- 14	- 9
Alewives.....	110	163	57	+ 53	- 53	+ 106
Pilchards.....	106	105	102	+ 4	+ 1	+ 3
Swordfish.....	102	157	96	+ 6	- 55	+ 61
Oils, fish.....	103	80	62	+ 41	+ 23	+ 18
Other articles of the fisheries.....	1,155	1,221	934	+ 221	- 66	+ 287
Total.....	41,800	44,209	34,932	+ 6,868	- 2,409	+ 9,277
Increase or decrease.....	-	-	-	p.c. + 19.7	p.c. - 6.9	p.c. + 26.5

8.—Number of Fish-Canning and Curing Establishments, by Provinces, 1922-1923.

Classification.	P.E.I.	N.S.	N.B.	Que.	Prairie Provinces.	B.C.	Total for Canada.
	No.	No.	No.	No.	No.	No.	No.
1922.							
Lobster canneries.....	185	157	173	71	-	-	586
Salmon canneries.....	-	1	-	2	-	64	67
Clam canneries.....	-	1	5	-	-	4	10
Sardine and other fish canneries.....	-	2	1	2	-	3	8
Fish oil factories.....	-	-	-	-	-	8	8
Fish-curing establishments.....	1	101	58	24	-	70	254
Total.....	186	262	237	99	-	149	933
1923.							
Lobster canneries.....	195	163	177	86	-	-	621
Salmon canneries.....	-	-	-	10	-	60	70
Clam canneries.....	3	3	5	-	-	4	15
Sardine and other fish canneries.....	-	2	1	-	-	1	4
Fish oil factories.....	-	-	-	-	-	8	8
Fish-curing establishments.....	1	98	39	26	-	56	220
Total.....	199	266	222	122	-	129	938

9.—Materials Used and Value of Products of Fish-Canning and Curing Establishments, 1920-1923.

Materials and Products.	1920.	1921.	1922.	1923.
	\$	\$	\$	\$
Materials used—				
Fish.....	14,347,089	8,524,407	11,625,726	11,453,694
Salt.....	456,013	292,526	339,828	323,945
Containers.....	4,229,490	2,874,809	3,534,638	3,458,947
Other.....	330,437	16,736	78,441	94,607
Total.....	19,363,029	11,708,478	15,578,633	15,331,193
Products—				
Fish marketed for consumption, fresh.....	5,092,174	5,376,393	5,546,447	5,846,102
Fish canned, cured or otherwise prepared.....	25,807,973	13,517,739	20,019,042	19,528,661
Total.....	30,900,147	18,894,132	25,565,489	25,374,763

Capital and Employees.—In 1923, the total capital invested in the fisheries was as follows: (a) in vessels, boats, nets, weirs, traps, wharves, ice-houses, etc., used in the primary operations of capturing the fish, \$23,645,316, of which \$19,614,772 was invested in the sea fisheries and \$4,030,544 in the inland fisheries; (b) in fish canning and curing establishments (land, buildings, machinery, supplies on hand, cash and operating accounts) \$24,027,549—grand total \$47,672,865. The number of employees engaged in the primary operations of fishing was 53,517 in 1923, and in canning and curing establishments, 15,447, a total of 68,964. The total salaries and wages bill in canneries and fish-curing establishments was \$3,769,914. Tables 10 and 11, herewith, show the items included in the above totals, with comparative figures for 1922, whilst Table 12 analyzes the salaries, wages and earnings of the employees in canneries, etc.

10.—Number and Capital Value of Fishing Vessels, Boats, Nets, Traps, etc., used in the Fisheries of Canada, 1922 and 1923.

Equipment.	1922.		1923.	
	Number	Value.	Number.	Value.
		\$		\$
Sea Fisheries—				
Steam trawlers.....	9	790,000	11	940,000
Steam fishing vessels.....	14	350,150	14	545,000
Sailing and gasoline vessels.....	1,107	4,691,654	1,015	3,997,275
Boats (sail and row).....	15,658	787,392	13,946	563,173
Boats (gasoline).....	14,644	4,955,858	13,646	4,097,280
Carrying smacks and scows.....	372	343,100	426	375,225
Gill nets, seines, trap and smelt nets, etc.....	101,577	3,664,530	98,785	3,819,996
Weirs.....	580	559,555	430	389,030
Trawls.....	27,189	437,640	21,327	344,729
Hand lines.....	57,814	97,768	53,325	84,609
Crab traps.....	6,450	15,217	5,667	13,260
Scallop gear.....	48	4,360	48	4,360
Oyster plant and equipment.....	1	20,690	1	20,690
Lobster traps.....	1,427,261	1,783,379	1,620,248	1,974,610
Fishing piers and wharves.....	2,484	1,151,815	2,437	1,038,575
Freezers and ice-houses.....	504	495,471	630	473,366
Small fish and smoke houses.....	8,144	986,883	7,586	933,594
Total value, Sea Fisheries.....	—	21,135,462	—	19,614,772

10.—Number and Capital Value of Fishing Vessels, Boats, Nets, Traps, etc., used in the Fisheries of Canada, 1922 and 1923—concluded.

Equipment.	1922.		1923.	
	Number.	Value.	Number.	Value.
Inland Fisheries—		\$		\$
Steam vessels or tugs.....	121	873,182	122	767,696
Boats (sail and row).....	3,266	163,952	3,144	157,872
Boats (gasoline).....	1,223	641,210	1,196	615,871
Scows.....	3	5,000	2	4,000
Gill nets.....	—	1,170,868	—	1,111,626
Seines.....	186	25,116	172	20,816
Pound nets.....	1,285	971,835	1,297	648,741
Hoop nets.....	1,330	43,331	944	54,973
Dip or roll nets.....	59	629	36	475
Lines.....	2,342	12,863	1,513	9,136
Weirs.....	92	7,069	275	82,460
Fel traps.....	—	—	4	80
Fish wheels.....	3	375	2	300
Spears.....	151	1,054	125	868
Fishing piers and wharves.....	403	150,330	372	137,682
Freezers and ice-houses.....	804	413,324	783	390,158
Small fish and smoke houses.....	124	28,050	156	27,790
Total value, Inland Fisheries.....	—	4,513,188	—	4,030,544
Description.	1922.		1923.	
	Number.	Value.	Number.	Value.
Fish-Canning and Curing Establishments—		\$		\$
Lobster canneries.....	586	2,049,405	621	2,081,260
Salmon canneries.....	67	12,932,618	70	12,763,398
Clam canneries.....	10	82,012	15	87,910
Sardine and other fish canneries.....	8	727,133	4	846,163
Whale oil and fish oil factories.....	8	699,088	8	1,200,017
Fish-curing establishments.....	254	5,626,082	220	7,048,801
Total of Fish-Canning and Curing Establishments.....	933	22,116,338	938	24,027,549
Grand Total Capital Invested in Fisheries.....	—	47,764,988	—	47,672,865

11.—Number of Persons Employed in the Fisheries of Canada, 1922 and 1923.

Employed in	Sea Fisheries.		Inland Fisheries.	
	1922.	1923.	1922.	1923.
	No.	No.	No.	No.
Steam trawlers.....	163	193	—	—
Vessels.....	6,576	5,797	764	704
Boats.....	41,017	37,329	6,927	6,404
Carrying smacks.....	530	745	6	4
Fishing, not in boats.....	—	—	1,897	2,341
Total.....	48,286	44,064	9,594	9,453

Employed in	Fish-Canning and Curing Establishments.					
	1922.			1923.		
	Male.	Female.	Total.	Male.	Female.	Total.
	No.	No.	No.	No.	No.	No.
Lobster canneries.....	3,792	4,135	7,927	3,506	4,139	7,645
Salmon canneries.....	3,190	2,025	5,215	2,972	1,819	4,791
Clam canneries.....	94	101	195	56	95	151
Sardine and other fish canneries.....	298	294	592	252	137	389
Whale oil and fish oil factories.....	155	1	156	303	1	304
Fish-curing establishments.....	2,286	206	2,492	1,929	238	2,167
Total.....	9,815	6,762	16,577	9,018	6,429	15,447
Grand Total in all Fisheries.....	67,695	6,762	74,457	62,535	6,429	68,964

12.—Salaries and Wages in Fish-Canning and Curing Establishments, 1920-1923.

Years.	On Salaries.		On Wages.		Contract and Piece-Workers.		Total.	
	No.	\$	No.	\$	No.	\$	No.	\$
1920.....	651	759,176	13,137	3,180,701	4,711	916,413	18,499	4,856,290
1921.....	487	551,330	10,534	2,023,040	3,083	399,016	14,104	2,973,386
1922.....	614	682,535	11,848	2,358,780	4,115	600,415	16,577	3,641,730
1923.....	585	681,101	11,265	2,443,971	3,597	644,842	15,447	3,769,914

Trade.—For reasons already noted, the domestic consumption of fish is relatively small in Canada, and the trade depends largely upon foreign markets. Perhaps 60 p. c. of the annual capture is an average export, of which the United States takes approximately one-half and Great Britain one-quarter. In the fiscal year 1922-23, total exports amounted to \$27,792,481, of which \$13,218,462 went to the United States and \$3,746,871 to the United Kingdom. The most important single export is canned salmon (to Great Britain and European markets), followed closely by cod, dry salted (to the West Indies, South America, etc.). For fresh fish, especially whitefish and lobsters, the United States is the chief market. In brief, Canada's export trade in fish falls below that of Great Britain and Norway alone; including Newfoundland it exceeds both. Canadian imports of fish in 1922-23 amounted to \$855,489. A general review of the import and export trade in fish over the past twenty years is given in Table 13, whilst Table 14 gives the comparative record of exports by countries during the past two years. Table 15 shows the leading items of export for 1922 and 1923. For a complete analysis of imports and exports, see annual report on Fisheries Statistics, issued by the Dominion Bureau of Statistics.

13.—Value of Exports and Imports of Fish and Fish Products, 1902-1923.

Years.	Exports, fisheries, domestic.	Imports of fish for home consumption.		Years.	Exports, fisheries, domestic.	Imports of fish for home consumption.	
		Dutiable.	Free.			Dutiable.	Free.
	\$	\$	\$		\$	\$	\$
1902.....	14,143,294	591,064	451,835	1913.....	16,336,721	1,519,571	910,923
1903.....	11,800,184	629,545	633,680	1914.....	20,623,560	1,469,305	635,231
1904.....	10,759,029	704,577	685,936	1915.....	19,687,068	1,080,225	568,880
1905.....	11,114,318	713,264	630,660	1916.....	22,377,977	804,398	537,342
1906.....	16,025,840	756,410	1,152,253	1917.....	24,889,253	1,259,799	818,613
1907 ¹	10,362,142	699,218	862,880	1918.....	32,602,151	966,643	1,397,127
1908.....	13,867,367	795,612	1,026,996	1919.....	37,137,072	1,054,848	2,079,530
1909.....	13,319,664	746,315	814,770	1920.....	42,285,035	2,605,379	1,334,718
1910.....	15,663,162	909,036	715,703	1921.....	33,581,383	2,416,152	1,809,960
1911.....	15,675,544	1,123,581	669,033	1922.....	29,521,894	2,172,850	970,028
1912.....	16,704,678	1,203,045	984,458	1923.....	27,792,481	2,066,300	855,489

¹ Nine months.

14.—Exports of the Fisheries, the produce of Canada, by principal Countries, in the fiscal years 1922 and 1923.

Exports to—	1922.	1923.	Exports to—	1922.	1923.
	\$	\$		\$	\$
United Kingdom.....	5,541,103	3,746,871	South Africa.....	23,538	41,582
Australia.....	727,434	494,473	Straits Settlements.....	113,829	46,810
British W. Indies.....	1,347,408	1,277,429	Fiji.....	43,099	59,144
British Guiana.....	224,435	185,641	Egypt and Sudan.....	26,695	5,355
New Zealand.....	139,183	301,178	Gibraltar.....	55,645	—
Newfoundland.....	29,020	47,821	Other British possessions	31,977	43,258
Hong Kong.....	319,636	261,533			
Bermuda.....	31,819	37,241	Total British Empire.	8,654,821	6,548,336

14.—Exports of the Fisheries, the produce of Canada, by principal Countries, in the fiscal years 1922 and 1923—concluded.

Exports to—	1922.	1923.	Exports to—	1922.	1923.
	\$	\$		\$	\$
United States.....	12,737,432	13,218,462	Netherlands.....	67,485	47,944
Belgium.....	283,720	425,519	Dutch East Indies.....	30,017	7,442
Brazil.....	798,869	672,559	Dutch Guiana.....	82,050	78,622
China.....	188,380	306,386	Norway.....	29,154	66,520
Costa Rica.....	57,564	36,040	Sweden.....	129,805	221,491
Cuba.....	1,176,125	832,767	Panama.....	81,730	72,098
Denmark.....	82,863	146,421	Porto Rico.....	1,073,937	936,271
France.....	2,564,953	2,523,729	Other foreign countries...	62,365	91,693
Greece.....	24,995		Total Foreign Countries	20,867,073	21,244,145
Italy.....	671,214	691,345			
Japan.....	724,415	868,836	Grand Total of Exports.	29,521,894	27,792,481

15.—Exports of the Fisheries, compared as to Quantity and Value, for the fiscal years 1922 and 1923. ("000" omitted).

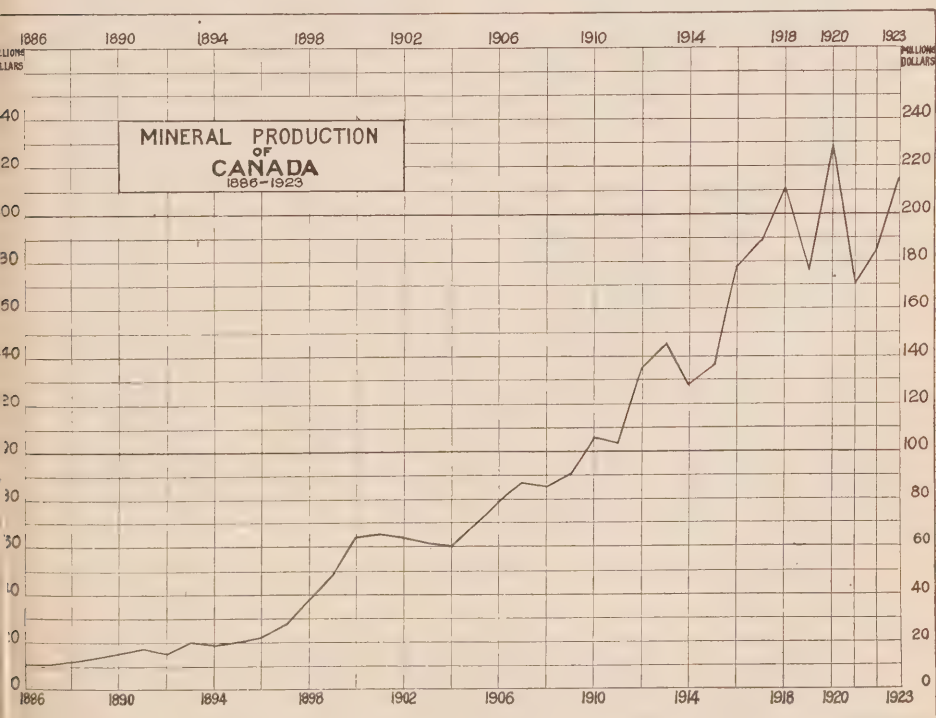
Kinds of Fish.	Actual value, 1923.	Value at prices of 1922.	Actual value, 1922.	Increase (+) or decrease (-).	Due to higher (+) or lower (-) prices.	Due to larger (+) or smaller (-) quantities.
	\$	\$	\$	\$	\$	\$
Alewives, salted.....	65	69	65	-	4	+
Bait fish.....	41	42	65	- 24	1	23
Codfish, boneless, canned and preserved	150	167	161	- 11	17	+
Codfish, dried.....	4,677	4,673	5,509	832	+	836
Codfish, fresh and frozen.....	34	31	83	- 49	3	52
Codfish, green-salted (pickled).....	530	533	643	- 113	3	110
Clams, fresh and canned.....	102	117	84	+ 18	15	+
Eels.....	66	95	86	- 20	29	+
Haddock, canned.....	3	2	1	+ 2	1	+
Haddock, dried.....	193	224	162	+ 31	31	62
Haddock, fresh and frozen.....	9	9	63	- 54	-	54
Haddock, smoked.....	122	138	139	- 17	16	-
Halibut, fresh and frozen.....	754	729	855	- 101	25	126
Herring, lake, fresh and frozen.....	320	294	293	+ 27	26	+
Herring, lake, pickled.....	6	5	9	- 3	1	4
Herring, sea, canned.....	144	133	93	+ 51	11	40
Herring, sea, dry-salted.....	1,031	998	1,000	+ 31	33	2
Herring, sea, fresh and frozen.....	164	146	104	+ 60	18	42
Herring, sea, pickled.....	257	325	389	- 132	68	64
Herring, sea, smoked.....	254	285	201	+ 53	31	84
Lobsters, canned.....	4,807	3,952	3,756	+ 1,051	855	196
Lobsters, fresh.....	1,042	813	1,403	- 361	229	590
Mackerel, fresh and frozen.....	858	997	560	+ 298	139	437
Mackerel, pickled.....	530	612	384	+ 146	82	228
Pilchards, canned.....	84	93	131	- 47	9	38
Pollock, hake and cusk, fresh and frozen.	13	11	9	+ 4	2	2
Pollock, hake and cusk, dried.....	412	401	441	- 29	11	40
Pollock, hake and cusk, green-salted.....	45	46	27	+ 18	1	19
Salmon, canned.....	4,489	4,748	6,433	- 1,944	259	1,685
Salmon, dry-salted (chum).....	377	351	222	+ 155	26	129
Salmon, fresh and frozen.....	934	901	993	- 59	33	92
Salmon, pickled.....	399	353	231	+ 168	46	122
Salmon or lake trout.....	304	345	346	- 42	41	1
Sea fish, other, fresh.....	35	229	30	+ 5	194	199
Smelts.....	803	727	1,064	- 261	76	337
Swordfish.....	98	137	129	- 31	39	8
Tullibee.....	119	87	118	+ 1	32	31
Whitefish.....	1,111	1,128	1,150	- 39	17	22
Fish, other, fresh and frozen.....	1,979	2,010	1,829	+ 150	31	181
Tongues and sounds.....	5	5	3	+ 2	-	2
Oil, fish, cod.....	103	87	80	+ 23	16	7
Oil, fish, other.....	24	15	22	+ 2	9	7
Oil, seal.....	4	6	12	- 8	2	6
Oil, whale.....	103	105	27	+ 76	2	78
Other articles of the fisheries.....	192	189	117	+ 75	3	72
Total.....	27,792	27,363	29,522	- 1,730	+ 429	- 2,159
Increase or decrease.....	-	-	-	p.c. 5.9	p.c. 1.5	p.c. 7.2

VI.—MINES AND MINERALS.¹

The appended description of the mines and minerals industry in Canada is divided into five parts: (1) a summary of general production, (2) industrial organization of the mining industry, (3) metallic minerals, (4) non-metallic minerals, and (5) clay products and structural materials.

1.—General Production.

Notwithstanding the rapid development of mineral production in Canada during recent years—the value of the annual output has increased from \$10,250,000 in 1886 to more than \$214,000,000 in 1923—the possibilities in the future are of even greater interest. The natural difficulties of travel in the northland have hindered the progress even of reconnaissance work, and a large part of Canada is still unexplored. Nevertheless, sufficient has been done to make known its main geological features, to indicate roughly the territories that will be found to be mineral-bearing, and to predict the character of the mineral resources in the different geological provinces. In fact, Canada today offers to the prospector the largest and most promising extent of mineral-bearing territory that anywhere remains unprospected. The growth of the industry since 1886 is shown in the following diagram.



¹ See also article "Geological Formation of Canada," pp. 14-21 of this edition of the Year Book. This article is condensed in part from previous articles contributed by Messrs. R. W. Brock, M.A., LL.D., F.G.S., formerly Director of the Geological Survey, and Wyatt Malcolm, M.A., Compiler of Geological Information, Department of Mines.

The opinion is often advanced that Canada is likely to become one of the leading mineral producing countries of the world, and considerable ground for this assumption is found in the fact that the Dominion contains 16 p.c. of the world's known coal resources, has greater asbestos, nickel and cobalt deposits than any other country, and ranks third in the production of gold, while the diversity of mineral endowment is indicated by the fact that the three main divisions, metallic, non-metallic and structural and clay products, include some 60 principal items, 20 of which had each, in 1923, a production valued at \$1,000,000 or over.

Figures of total production fail to convey a correct impression of the magnitude of the industry, on account of the diversity of the product and of the units involved, while the varying prices attendant upon fluctuating market conditions vitiate comparisons on the value basis. As commodity prices reached a peak in 1920 and have since receded, production computed in terms of value is not a fair basis for comparison. A weighted index showing the volume of production would undoubtedly mark 1923 as the banner year in Canada's mineral industry, as new output records were established in that year for coal, lead, zinc and asbestos, while the value of cobalt was also the largest on record.

1.—General Statistics of Mineral Production.

In Table 1 will be found the total value of the minerals produced in Canada for each year since 1886, while Table 2 gives the details of the mineral production of 1922 and 1923, with the percentages of increase or decrease in the latter year. An interesting comparison of the mineral production of the two years, as to quantities and values, is furnished in Table 3, which shows that the increase of 16·15 p.c. in the value of product in the latter year as compared with the former occurred in spite of a decline of 4·99 p.c. in average prices. Had all prices been the same in 1923 as in 1922, the increase in value due to increased quantities would have been 21·14 p.c.

1.—Value of Mineral Production in Canada, calendar years 1886-1923.

Calendar Years.	Total value.	Value per capita.	Calendar Years.	Total value.	Value per capita.	Calendar Years.	Total value.	Value per capita.
	\$	\$		\$	\$		\$	\$
1886.....	10,221,255	2·23	1899.....	49,234,005	9·27	1912.....	135,048,296	18·32
1887.....	10,321,331	2·23	1900.....	64,420,877	12·04	1913.....	145,634,812	19·35
1888.....	12,518,894	2·67	1901.....	65,797,911	12·16	1914.....	128,863,075	16·75
1889.....	14,013,113	2·96	1902.....	63,231,836	11·36	1915.....	137,109,171	17·44
1890.....	16,763,353	3·50	1903.....	61,740,513	10·83	1916.....	177,201,534	22·05
1891.....	18,976,616	3·92	1904.....	60,082,771	10·27	1917.....	189,646,821	23·18
1892.....	16,623,415	3·39	1905.....	69,078,999	11·49	1918.....	211,301,897	25·36
1893.....	20,055,082	4·04	1906.....	79,286,697	12·81	1919.....	176,656,390	20·84
1894.....	19,931,158	3·98	1907.....	86,865,202	13·75	1920.....	227,859,665	26·40
1895.....	20,505,917	4·05	1908.....	85,557,101	13·16	1921.....	171,923,342	19·56
1896.....	22,474,256	4·38	1909.....	91,831,441	13·70	1922.....	154,297,242	20·61
1897.....	28,485,023	5·49	1910.....	106,823,623	15·44	1923.....	214,079,331	23·57
1898.....	38,412,431	7·32	1911.....	103,220,994	14·32			

2.—Mineral Production of Canada, calendar years 1922 and 1923.

Products.	1922.		1923.		Increase (+) or Decrease (—)	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
METALLIC.						
Arsenic..... ton	2,576	\$ 321,037	3,911	\$ 626,815	+ 24·6	+ 95·2
Chromite..... "	767	11,503	3,558	52,650	+ 363·8	+ 357·7
Cobalt..... lb.	569,960	1,852,370	888,061	2,530,974	+ 55·8	+ 36·7
Copper..... "	42,879,818	5,738,177	86,881,537	12,529,186	+ 102·6	+ 118·3
Gold..... fine oz.	1,263,364	26,116,050	1,233,341	25,495,421	— 4·6	— 4·6
Iron, pig, from Canadian ore..... ton	8,095	178,980	20,739	432,298	+ 156·1	+ 141·5

2.—Mineral Production of Canada, calendar years 1922 and 1923—concluded.

Products.	1922.		1923.		Increase (+) or Decrease (-).	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
METALLIC—concluded.						
Iron ore sold for export ton	1,781	\$ 4,938	5,670	\$ 20,279	p.c.	p.c.
Lead..... lb.	93,307,171	5,817,702	111,234,366	7,955,522	+ 218.4	+ 310.8
Manganese..... ton	73	2,044	200	1,400	+ 19.2	+ 37.3
Nickel..... lb.	17,597,123	6,158,993	62,453,543	18,332,077	+ 273.9	+ 31.5
Palladium..... oz.	724	47,060	1,732	138,560	+ 254.9	+ 197.6
Platinum..... "	469	45,783	1,217	141,826	+ 139.2	+ 194.4
Rhodium, Osmium, Iridium, Ruthenium oz.	392	31,360	304	45,000	+ 159.4	+ 209.7
Silver..... fine oz.	18,626,439	12,576,758	18,601,744	12,067,509	- 22.5	+ 43.5
Zinc..... lb.	56,290,000	3,217,536	60,416,240	3,991,701	+ 0.1	+ 4.1
					+ 7.4	+ 24.1
Total.....	-	62,120,291	-	84,391,218	-	+ 35.9
NON-METALLIC.						
Actinolite..... ton	50	575	53	583	+ 6.0	+ 1.3
Asbestos..... "	163,706	5,552,723	231,482	7,522,506	+ 41.5	+ 35.4
Barytes..... "	289	9,537	409	8,548	+ 41.6	+ 10.4
Coal..... "	15,157,431	65,518,497	16,990,571	72,058,986	+ 12.1	+ 10.0
Feldspar..... "	27,727	248,402	29,225	237,601	+ 5.4	+ 3.2
Fluorspar..... "	4,503	102,138	139	1,732	- 96.9	- 98.3
Garnets..... "	-	-	1,250	100,000	-	-
Graphite..... "	597	31,353	1,113	67,873	+ 86.4	+ 116.5
Grindstones..... "	1,005	43,742	2,014	80,083	+ 100.4	+ 84.8
Gypsum..... "	559,265	2,160,898	578,301	2,243,100	+ 3.4	+ 3.8
Magnesite..... "	2,849	76,294	4,801	134,382	+ 68.5	+ 76.2
Magnesium sulphate..... "	1,021	24,017	121	6,580	+ 88.2	+ 72.8
Mica..... "	3,349	152,263	3,525	326,974	+ 5.2	+ 114.7
Mineral water..... gal.	221,433	14,220	232,451	16,455	+ 5.0	+ 15.7
Natro-alumite..... ton	50	2,500	15	750	- 70.0	- 70.0
Natural gas..... M cu. ft.	14,682,651	5,846,501	15,960,583	5,884,618	+ 8.7	+ 0.7
Iron oxides..... ton	7,285	110,608	10,424	129,636	+ 43.1	+ 17.2
Peat..... "	8,000	14,500	-	-	-	-
Petroleum, crude..... brl.	179,068	611,176	170,169	522,018	- 5.0	- 14.6
Phosphate..... ton	190	1,796	30	600	- 83.4	- 48.8
Pyrites..... "	18,143	74,303	28,951	113,020	+ 59.6	+ 52.1
Quartz..... "	109,947	208,598	264,076	599,250	+ 140.0	+ 187.2
Salt..... "	181,794	1,628,323	202,597	1,713,516	+ 11.4	+ 5.2
Sodium carbonate..... "	202	3,027	265	3,975	+ 31.1	+ 81.3
Sodium sulphate..... "	504	11,980	733	10,189	+ 45.4	+ 14.9
Talc..... "	13,195	188,458	10,366	150,507	- 21.4	- 20.1
Tripolite..... "	219	5,781	130	3,250	- 40.7	- 43.8
Total.....	-	82,642,210	-	91,936,732	-	+ 11.3
STRUCTURAL MATERIALS AND CLAY PRODUCTS.						
Cement, Portland..... brl.	6,943,972	15,438,481	7,543,589	15,054,661	+ 8.4	- 2.4
Clay products—						
Bricks, common.... No.	294,919,113	4,714,658	250,564,227	3,884,474	- 15.0	- 18.4
" pressed..... "	90,577,826	1,839,549	73,400,574	1,461,483	- 18.9	- 20.6
" hollow building.. "	4,892,504	448,674	7,720,476	620,329	+ 57.8	+ 38.2
" moulded and ornamental "	41,851,765	865,664	64,682,454	1,355,360	+ 54.5	+ 56.5
Fire brick..... "	6,703,127	251,776	6,122,055	295,037	- 8.6	+ 17.1
Fire clay..... ton	10,196	55,185	2,685	24,158	- 73.7	- 56.3
Fire clay blocks..... "	-	67,588	-	81,345	-	+ 20.3
Fireproofing and hollow porous blocks..... "	-	542,611	-	379,805	-	- 30.0
Kaolin..... ton	1,197	17,866	163	2,369	- 186.4	- 86.7
Paving brick..... No.	150,813	5,972	-	-	-	-
Pottery from domestic clay..... "	-	266,391	-	229,547	-	- 13.8
Sewer pipe..... ton	75,932	1,766,347	70,252	1,616,324	- 7.5	- 8.3
Architectural terra-cotta..... "	-	188,789	-	209,471	-	+ 11.0
Tile, drain..... No.	14,730,963	407,386	10,598,891	323,314	- 28.1	- 20.6
Lime..... bush.	8,972,971	3,165,005	10,035,319	3,266,608	+ 12.0	+ 3.2
Sand and gravel..... ton	11,666,371	3,502,935	12,752,515	3,016,518	+ 9.2	+ 13.9
Slate..... "	1,899	14,871	1,836	17,289	- 3.3	+ 16.2
Stone..... "	3,637,182	5,974,993	4,111,334	5,903,289	+ 12.8	+ 1.2
Total.....	-	39,534,741	-	37,751,381	-	- 4.5
Grand Total.....	-	184,297,242	-	214,079,331	-	+ 16.1

3.—Mineral Production of Canada, compared as to Quantity and Value, in calendar years 1922 and 1923. ("000" omitted).

Products.	Actual value 1923.	Value at prices of 1922.	Actual value 1922.	Increase (+) or decrease (-).	Due to higher (+) or lower (-) prices.	Due to larger (+) or smaller (-) quantities.
	\$	\$	\$	\$	\$	\$
METALLIC.						
Arsenic.....	627	442	321	+ 306	+ 185	+ 121
Chromite.....	53	80	12	+ 41	+ 27	+ 68
Cobalt.....	2,531	2,886	1,852	+ 679	+ 355	+ 1,034
Copper.....	12,529	11,626	5,738	+ 6,791	+ 903	+ 5,888
Gold.....	25,495	25,495	26,116	- 621	-	- 621
Iron, pig, from Canadian ore.....	432	459	179	+ 253	+ 27	+ 280
Iron ore sold for export.....	20	18	5	+ 15	+ 2	+ 13
Lead.....	7,985	6,916	5,817	+ 2,168	+ 1,069	+ 1,099
Nickel.....	18,332	21,859	6,159	+ 12,173	+ 3,527	+ 15,700
Palladium.....	139	113	47	+ 92	+ 26	+ 66
Platinum.....	142	118	46	+ 96	+ 24	+ 72
Silver.....	12,068	12,559	12,577	- 509	- 491	- 18
Zinc.....	3,992	5,382	3,218	+ 774	+ 1,390	+ 2,164
Other.....	46	30	33	+ 13	+ 16	+ 3
Total.....	84,391	87,983	62,120	+22,271	- 3,592	+ 25,863
NON-METALLIC.						
Asbestos.....	7,522	7,852	5,553	+ 1,969	- 330	+ 2,299
Coal.....	72,059	73,399	65,518	+ 6,541	- 1,340	+ 7,881
Feldspar.....	238	262	248	- 10	+ 24	+ 14
Fluorspar.....	2	3	102	- 100	+ 1	- 99
Graphite.....	68	58	31	+ 37	+ 10	+ 27
Grindstones.....	80	88	44	+ 36	+ 8	+ 44
Gypsum.....	2,243	2,232	2,161	+ 82	+ 11	+ 71
Magnesite.....	134	129	76	+ 58	+ 5	+ 53
Magnesium sulphate.....	7	3	24	- 17	+ 4	- 21
Mica.....	327	160	152	+ 175	+ 167	+ 8
Mineral water.....	16	14	14	+ 2	+ 2	-
Natural gas.....	5,885	6,356	5,846	+ 39	- 471	+ 510
Iron oxides.....	130	158	111	+ 19	+ 28	+ 47
Petroleum, crude.....	522	581	611	- 89	- 59	- 30
Pyrites.....	113	119	74	+ 39	+ 6	+ 45
Quartz.....	599	504	209	+ 390	+ 95	+ 295
Salt.....	1,714	1,813	1,628	+ 86	+ 99	+ 185
Talc.....	150	148	188	- 38	+ 2	- 40
Other.....	128	145	52	+ 76	- 17	+ 93
Total.....	91,937	94,024	82,642	+ 9,295	- 2,087	+ 11,382
STRUCTURAL MATERIALS AND CLAY PRODUCTS.						
Cement, Portland.....	15,065	16,772	15,438	- 373	- 1,707	+ 1,334
Clay products—						
Bricks, common.....	3,885	4,006	4,714	- 829	- 121	- 708
“ pressed.....	1,462	1,490	1,839	- 377	- 28	- 349
“ hollow building.....	620	708	448	+ 172	- 88	+ 260
“ moulded and ornamental.....	1,355	1,338	866	+ 499	+ 17	+ 472
Fire brick.....	295	230	252	+ 43	+ 65	- 22
Fire clay.....	24	15	55	- 31	+ 9	- 40
Sewer pipe.....	1,616	1,634	1,766	- 150	- 18	- 132
Tile, drain.....	323	293	407	- 84	+ 30	- 114
Lime.....	3,267	3,512	3,165	+ 102	- 245	+ 347
Sand and gravel.....	3,017	3,824	3,503	- 486	- 807	+ 321
Slate.....	17	14	15	+ 2	+ 3	- 1
Stone.....	5,903	6,529	5,975	- 72	- 626	+ 554
Other.....	903	909	1,092	- 189	- 6	- 183
Total.....	37,752	41,274	39,535	- 1,783	- 3,522	+ 1,739
Grand Total.....	214,080	223,251	184,297	+29,783	- 9,201	+ 38,954
Increase or decrease, p.c.....	-	-	-	+ 16.15	- 4.99	+ 21.14

2.—Provincial Distribution of Mineral Production.

The principal mineral producing province of Canada in 1923 was Ontario, with an output valued at \$80,825,851. British Columbia came second with a mineral production valued at \$43,757,388. Alberta was third with \$31,287,536, and Nova Scotia ranked fourth with \$29,648,893. Quebec was fifth with \$20,308,763, and Yukon Territory, New Brunswick, Manitoba and Saskatchewan followed in the order named, with productions of between one and three million dollars each.

4.—Mineral Production of Canada, by Provinces, 1899-1923.

Calendar Years.	Nova Scotia. ¹	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	Yukon.	British Columbia.
	\$	\$	\$	\$	\$	\$	\$	\$	\$
1899....	6,817,274	420,227	2,585,635	9,819,557		17,108,707			12,482,605
1900....	9,298,479	439,060	3,292,383	11,258,099		23,452,330			16,680,526
1901....	7,770,159	467,985	3,759,984	13,970,010		19,297,940			20,531,833
1902....	10,686,549	607,129	3,743,636	14,619,091		16,127,400			17,448,031
1903....	11,431,914	580,495	3,585,938	14,160,033		14,082,986			17,899,147
1904....	11,212,746	559,913	3,688,482	12,582,843		12,713,613			19,325,174
1905....	11,507,047	559,035	4,405,975	18,833,292		11,387,642			22,386,008
1906....	12,894,303	646,328	5,242,058	25,111,682		10,092,726			25,299,600
1907....	14,532,040	664,467	6,205,553	30,381,638	898,775	533,251	4,657,524	3,335,898	25,656,056
1908....	14,487,108	579,816	6,372,949	30,623,812	584,374	413,212	5,122,505	3,669,290	23,704,035
1909....	12,504,810	657,035	7,086,265	37,374,577	1,193,377	456,246	6,047,447	4,032,678	22,479,006
1910....	14,195,730	581,942	8,270,136	43,538,078	1,500,359	498,122	8,996,210	4,764,474	24,478,572
1911....	15,409,397	612,830	9,304,717	42,796,162	1,791,772	636,706	6,662,673	4,707,432	21,299,305
1912....	18,922,236	771,004	11,656,998	51,985,876	2,463,074	1,165,642	12,073,589	5,933,242	30,076,635
1913....	19,376,183	1,102,613	13,475,534	59,167,749	2,214,496	881,142	15,054,046	6,276,737	28,086,312
1914....	17,584,639	1,014,570	11,836,929	53,034,677	2,413,489	712,313	12,684,234	5,418,185	24,164,039
1915....	18,088,342	903,467	11,619,275	61,071,287	1,318,387	451,933	9,909,347	5,057,708	28,689,425
1916....	20,042,262	1,118,187	14,406,598	80,461,323	1,823,576	590,473	13,297,543	5,491,610	39,969,962
1917....	21,104,542	1,435,024	17,400,077	89,066,600	2,628,264	860,651	16,527,535	4,482,202	36,141,926
1918....	22,317,108	2,144,017	19,605,347	94,694,093	3,120,600	1,019,781	23,109,987	2,355,631	42,935,333
1919....	23,445,215	1,770,945	21,267,947	67,917,998	2,868,378	1,521,964	21,087,582	1,940,934	34,865,427
1920....	34,130,017	2,491,787	28,886,214	81,715,808	4,223,461	1,837,468	33,586,456	1,576,726	39,411,728
1921....	28,912,111	1,901,505	15,157,094	57,356,651	1,934,117	1,114,220	30,562,229	1,754,955	33,230,460
1922....	25,923,499	2,263,692	17,646,529	65,866,029	2,258,942	1,255,470	27,872,136	1,785,573	39,423,562
1923....	29,648,893	2,462,457	20,308,763	80,855,851	1,768,037	1,047,583	31,287,536	2,972,823	43,757,388

¹Includes a small production from Prince Edward Island.

1.—NOVA SCOTIA.

Nova Scotia, though among the first portions of the North American continent to be settled, has always been an important mining centre. The natural facilities for exportation of mineral products to foreign markets favoured at an early date the mining of coal, iron ore and gypsum. The coal fields, though not so extensive as those of some of the western provinces, are more highly developed, the annual production being a little more than one-third of the total Canadian output. The product is an excellent grade of bituminous steam and coking coal. A large industrial development has taken place in the iron and steel industry of Sydney and New Glasgow, based on the locally available fuels and fluxes and iron ores from Newfoundland. The gold production, which remained fairly constant for many years, has recently fallen off.

While gypsum is second in importance among the non-metallics, the development of valuable beds of rock salt represents a recent addition, and there is also a fairly steady production of grindstone abrasives. Tripolite and infusorial earth deposits have been worked for nearly thirty years. Varied resources in structural materials are indicated by the abundant occurrence of marbles, granites, and sandstones of excellent quality, as well as limestone for building or lime-making. The

value of production in 1923, dominated as usual by the activity in coal-mining with a contribution of 95 p.c., attained a total of \$29,650,000, being in excess of the aggregates for each of the two preceding years.

5.—Mineral Production of Nova Scotia, 1921-1923.

Products.	1921.		1922.		1923.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		\$		\$		\$
METALLIC—						
Arsenic..... lb.	—	—	—	—	45,000	2,250
Gold..... fine oz.	465 ¹	9,091	1,128 ¹	21,598	680 ¹	13,556
Manganese..... ton	68	3,400	73	2,044	200	1,400
NON-METALLIC—						
Barytes..... "	270	9,567	289	9,537	209	4,368
Coal..... "	5,734,928	27,782,050	5,569,072	24,629,921	6,597,838	28,170,458
Feldspar..... "	16	117	—	—	—	—
Grindstones..... "	183	6,900	102	3,692	256	7,906
Gypsum..... "	206,831	511,883	332,404	580,148	341,705	747,934
Salt..... "	2,638	23,269	5,053	54,666	4,480	39,151
Tripolite..... "	341	11,268	219	5,781	130	3,250
STRUCTURAL MATERIALS AND CLAY PRODUCTS—						
Clay Products.....	—	361,761	—	431,618	—	413,974
Lime..... bush.	25,914	6,085	—	—	42,370	7,199
Stone..... ton	58,923	116,602	87,955	119,492	138,682	177,090
Other products.....	—	70,028 ²	—	65,002 ²	—	60,357 ²
Total.....	—	28,912,111	—	25,923,499	—	29,648,893

¹Includes 25 oz. silver, value \$16 in 1921, 86 oz. silver, value \$58 in 1922 and 25 oz. silver, value \$16 in 1923. ²Includes railway ballast from P.E.I., \$1,433 in 1921, \$10,028 in 1922 and \$4,429 in 1923.

2.—NEW BRUNSWICK.

Coal-mining in the Grand Lake district is the chief mining industry of New Brunswick. The production of gypsum is also of importance, and there is a considerable production of cut and polished granite at St. George from both imported and local stone. Activities in the petroleum industry are confined to the Stony Creek district, Albert County, where wells are operated by the New Brunswick Gas and Oilfields, Ltd..

6.—Mineral Production of New Brunswick, 1921-1923.

Products.	1921.		1922.		1923.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		\$		\$		\$
NON-METALLIC—						
Coal..... ton	187,192	920,666	287,513	1,107,643	276,617	1,196,772
Grindstones..... "	1,098	57,077	903	40,050	1,758	72,177
Gypsum..... "	54,030	360,220	82,462	517,668	104,740	564,680
Natural gas..... M cu. ft.	708,743	139,375	753,898	148,040	640,300	126,068
Petroleum..... bbl.	7,479	33,022	7,778	32,732	8,826	35,642
STRUCTURAL MATERIALS—						
Clay products.....	—	66,600	—	75,425	—	62,587
Lime..... bush.	562,447	203,084	560,834	187,895	329,548	143,814
Stone..... ton	15,125	97,290	12,027	104,730	22,448	166,083
Sand and gravel..... "	239,192	24,171	448,322	49,509	608,528	94,634
Total.....	—	1,901,505	—	2,263,692	—	2,462,457

3.—QUEBEC.

The geological formation of the province of Quebec indicates great latent wealth in minerals, as 90 p.c. of its immense area of 452,000,000 acres is underlain with rocks of pre-Cambrian age, an insignificant portion of which has as yet been touched by the prospector. The asbestos deposits of the Eastern Townships, which supply most of the world's requirements of this product, are at present the most important of the provinces mineral products. The tonnage has been continually increasing since 1921, but prices have declined.

Lead and zinc concentrates with values of gold and silver are shipped intermittently from Notre-Dame-des-Anges, and copper ores and concentrates have also been exported. Recent discoveries of gold in the northwestern part of the province adjacent to the Kirkland Lake district show that the rich gold deposits of Ontario extend across the interprovincial boundary into Northern Quebec and that the province may yet become an important producer of gold. Substantial quantities of bog iron ore are obtained in the vicinity of St. Maurice and Fermont near Three Rivers for the forges of French Canada, the first of which was established in 1670. Small quantities of titaniferous ore are now obtained from Baie St. Paul. Aluminium is manufactured in electric furnaces at Shawinigan Falls from imported bauxite ores.

The considerable variety of mineral products—many of which are found widely distributed and constitute important mineral reserves—is indicated in Table 7. The Canadian production of chromite in 1923 was restricted to the Black Lake district of Quebec, where about 25,000 tons were mined and treated by the Quebec Chrome Corporation. Shipments during the year comprised 3,558 tons of chrome concentrates (48 p.c., Cr_2O_3) valued at \$52,650. The deposits of phlogopite mica in the Lièvre-Gatineau district have been worked for many years. The limestones and igneous rocks of the province supply cement, building and ornamental stone and other materials of construction. Clays are extensively used for the manufacture of brick and sewerpipe.

7.—Mineral Production of Quebec, 1921-1923.¹

Products.	1921.		1922.		1923.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		\$		\$		\$
METALLIC—						
Chromite..... ton	2,798	55,696	767	11,503	3,558	52,650
Copper..... lb.	352,308	44,045	—	—	—	—
Gold..... oz.	635	13,127	—	—	667	13,788
Iron ore, sold for export..... ton	—	—	526	1,410	69	186
Lead..... lb.	595,881	34,215	—	—	520,041	37,334
Silver..... oz.	38,084	23,861	—	—	33,006	21,412
Zinc..... lb.	—	—	—	—	366,240	24,197
NON-METALLIC—						
Asbestos and asbestic..... ton	92,761	4,906,230	163,706	5,552,723	231,476	7,519,906
Feldspar..... " "	9,737	80,180	12,472	127,826	12,026	102,779
Graphite..... " "	38	2,423	24	1,500	45	2,316
Magnesite..... " "	2,927	74,109	2,849	76,294	4,801	134,382
Mica..... " "	484	41,172	1,360	97,748	1,545	216,684
Mineral water..... gal.	19,626	7,278	12,161	3,692	5,421	2,408
Iron oxides..... ton	8,879	92,765	7,282	110,488	9,911	123,186
Phosphate..... " "	30	450	131	1,320	30	600
Pyrites..... " "	1,986	10,463	—	—	—	—
Quartz..... " "	5,994	29,824	10,994	53,023	13,376	68,936
Talc..... " "	—	—	150	4,950	590	19,993

¹There is also in this province an important production of aluminium from imported ores.

7.—Mineral Production of Quebec, 1921-1923—concluded.

Products.	1921.		1922.		1923.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		\$		\$		\$
STRUCTURAL MATERIALS—						
Cement..... brl.	2,135,631	5,410,275	2,660,935	5,907,300	3,173,993	6,347,986
Clay products.....	—	1,742,872	—	2,476,370	—	2,437,229
Kaolin..... ton	124	1,888	1,197	17,866	163	2,369
Lime—						
Quick-lime..... bush.	1,940,594	754,375	2,108,513	634,157	2,357,928	634,213
Hydrated lime... ton	3,495	36,128	5,278	55,642		
Slate..... "	1	22,325	1,899	14,871	1,836	17,289
Stone..... "	719,499	1,662,641	987,355	2,342,316	1,094,816	2,322,745
Sand and gravel.... "	700,669	110,752	905,101	156,940	1,055,817	206,175
Total.....	—	15,157,094	—	17,647,939	—	20,308,763

¹ 415 squares and 2,232 tons crushed material.

4.—ONTARIO.

The mineral industry of Ontario is characterized by rapid growth, great variety of products and the domination of the world's market as regards nickel and cobalt. In fact Ontario now has the largest output as well as the greatest variety of mineral products of any of the Canadian provinces.

As the building of the Canadian Pacific led to the discovery of the vast nickel-copper deposits of the Sudbury area in 1883, so did the construction of the Timiskaming and Northern Ontario railway lead to the discovery of the world-famous silver deposits of Cobalt in 1903 and indirectly to the great gold deposits of Porcupine in 1909 and Kirkland lake in 1911. The finding of these gold-bearing areas has changed gold mining in Ontario to a world-famous industry.

The first discovery of silver in the Cobalt district was made in 1903, and the output of silver, commencing in 1904, increased rapidly until 1911, when 31,507,791 oz. were obtained. Since that time the production has been declining, but the life of the camp has been prolonged by the finding of "blind" veins, and especially by improvements in metallurgy, notably the "flotation" process, which turned waste dumps into valuable ore, and enabled low-grade wall rock to be profitably mined. Recently, because of the discovery in South Lorrain, a camp which had been practically abandoned, of high-grade ore quite equal in quality to the best ever mined in Cobalt proper, silver production is again rising. Another outlying camp established at a short distance from Cobalt is Gowganda.

The nickel deposits of Sudbury district are the most important of the known sources of nickel and supply a very large portion of the world's requirements of that metal. The deposits are so large that, in so far at least as this generation and the succeeding generation are concerned, they may be said to be inexhaustible. Ontario has produced more than 5,000,000 tons of iron ore and concentrates since 1869, the largest production being recorded in 1915, when 394,054 short tons were produced. The annual consumption of iron ore in the province averages normally about 1,000,000 short tons, but the bulk of this quantity comes from the United States. Lead of a high grade is produced at the Kingdon mine near Galletta.

Practically all the commercial non-metallic minerals with the exception of coal are produced in the province. The list includes such minerals as corundum, graphite, mica and talc, and the feldspar deposits are of exceptionally high grade.

The production of building materials is influenced by the extent of construction operations from time to time, but resources in this division are ample to meet the demand for products such as ornamental marble, limestone, granite, sand and gravel, lime, cement, brick and tile.

8.—Mineral Production of Ontario, 1921-1923.

Products.	1921.		1922.		1923.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		\$		\$		\$
METALLIC—						
Arsenic..... lb.	—	—	—	—	5,158,617	582,785
Arsenious oxide..... ton	1,491	233,763	2,058	299,940	—	—
Cobalt..... lb.	251,986	755,958	569,960	1,852,370	888,061	2,530,974
Copper..... “	12,821,385	1,602,930	10,943,636	1,464,477	31,656,800	4,565,227
Gold..... oz.	708,213	14,640,062	1,000,340	20,678,862	971,704	20,086,904
Iron ore, sold for export..... ton	48	242	—	—	5,358	18,878
Iron, pig, from Canadian ore ¹ “	56,564	1,873,682	8,095	178,980	20,739	432,298
Lead..... lb.	3,312,493	190,203	2,890,397	180,216	4,401,494	315,983
Nickel..... “	19,293,060	6,752,571	17,597,123	6,158,993	62,453,843	18,332,077
Platinum..... oz.	269	20,184	458	44,709	1,210	141,010
Palladium..... “	591	38,267	724	47,060	1,732	138,560
Rhodium, ruthenium, osmium, iridium..... “	57	9,690	391	31,280	304	45,000
Silver..... “	9,761,607	6,116,037	10,811,903	7,300,305	10,540,943	6,838,226
Zinc..... lb.	—	—	—	—	—	—
NON-METALLIC—						
Actinolite..... ton	78	975	50	575	53	583
Asbestos..... “	—	—	—	—	6	2,600
Barytes..... “	—	—	—	—	200	4,180
Corundum..... “	403	55,965	—	—	—	—
Feldspar..... “	20,115	150,457	15,255	120,576	17,199	134,822
Fluorspar..... “	116	1,744	284	3,905	64	597
Garnets..... “	—	—	—	—	1,250	100,000
Graphite..... “	899	63,439	573	29,853	1,068	65,557
Gypsum..... “	84,790	433,053	110,227	621,668	99,958	542,317
Mica..... “	218	28,891	1,989	54,515	1,979	110,290
Mineral water..... gal.	308,647	14,438	209,072	10,528	227,030	14,047
Natural gas..... M. cu. ft.	8,422,774	3,080,130	8,060,114	4,076,296	8,128,413	4,066,244
Peat..... ton	1,666	6,664	3,000	14,600	—	—
Petroleum..... bbl.	172,859	559,198	164,732	526,316	159,400	478,149
Phosphate..... ton	—	—	59	476	—	—
Pyrites..... “	27,785	101,306	11,233	39,763	25,134	99,716
Quartz..... “	27,063	220,806	81,528	118,054	225,110	483,285
Salt..... “	161,987	1,649,626	176,741	1,573,657	197,917	1,674,365
Talc..... “	9,967	140,390	12,854	178,728	9,531	125,124
STRUCTURAL MATERIALS AND CLAY PRODUCTS—						
Cement..... bbl.	2,723,071	6,424,356	3,104,386	6,393,566	3,296,428	5,855,589
Clay products..... “	—	5,183,125	—	6,944,218	—	6,270,615
Lime—						
Quicklime..... bush.	2,763,062	962,439	3,939,954	1,311,563	6,002,621	1,893,663
Hydrated..... ton	26,862	381,749	36,408	455,980		
Stone..... “	2,716,080	4,167,582	2,317,265	2,969,926	2,638,984	2,869,228
Sand and gravel..... “	6,273,173	1,496,729	6,285,123	2,184,174	8,146,433	2,006,958
Total	—	57,356,651	—	65,886,029	—	80,825,851

¹ The total production of blast-furnace pig-iron in Ontario in 1921 was 494,901 tons valued at \$11,856,352; in 1922, 293,662 tons valued at \$6,493,513; in 1923, 602,168 tons valued at \$15,995,496.

5.—MANITOBA.

About three-fifths of the total area is underlain with pre-Cambrian rocks. Copper has been mined in the Pas mineral belt, but the low prices and lack of adequate smelting and transportation facilities have militated against operation in the last four years. Some gold has also been found in contiguous districts.

The south and southwestern sections of the province constitute the main source of the non-metallic mineral production. A mottled limestone of a handsome variety quarried at Tyndall is in wide demand as a building stone; gypsum is mined at Gypsumville, and Portland cement is manufactured at Winnipeg and Babcock.

9.—Mineral Production of Manitoba, 1921-1923.

Products.	1921.		1922.		1923.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		\$		\$		\$
METALLIC—						
Gold..... oz.	207	4,279	156	3,225	31	641
Silver..... "	33	20	20	14	5	3
NON-METALLIC—						
Gypsum..... ton	40,859	480,282	34,072	440,914	31,574	386,554
Natural gas..... M cu. ft.	200	60	200	60	200	60
STRUCTURAL MATERIALS AND CLAY PRODUCTS—						
Clay products.....	—	208,982	—	210,740	—	160,134
Lime..... bush.	413,283	136,375	382,184	163,799	524,128	161,226
Stone..... ton	16,868	56,666	34,359	106,638	51,304	118,277
Other products ¹	—	1,047,453	—	1,333,552	—	941,142
Total.....	—	1,934,117	—	2,258,912	—	1,768,037

¹Includes cement and sand and gravel.

6.—SASKATCHEWAN.

The province of Saskatchewan is mostly agricultural in character, but the conditions in the southern part are favourable to the production of non-metallic minerals in considerable volume. Lignites are mined in the southern part of the province; brick clays are widely utilized, and to the south of Moose Jaw, there are extensive beds of refractory clays that are used in the manufacture of fire brick, stoneware, pottery and sewer pipe. Large areas of unprospected territory in the north are underlain by the same pre-Cambrian rocks that have proved mineral-bearing in other parts of Canada. In this territory lode-gold has been reported near Beaver lake, and iron and other metallic minerals near lake Athabaska.

10.—Mineral Production of Saskatchewan, 1921-1923.

Products.	1921.		1922.		1923.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		\$		\$		\$
NON-METALLIC—						
Coal..... ton	335,632	823,180	382,437	802,053	438,100	858,441
Magnesium sulphate "	2	120	—	—	—	—
Salt..... "	33	790	—	—	—	—
Sodium sulphate.... "	624	18,850	504	11,980	733	10,18.
STRUCTURAL MATERIALS AND CLAY PRODUCTS—						
Clay products.....	—	166,244	—	134,704	—	119,405
Sand and gravel..... ton	—	105,036	924,944	306,733	438,319	59,541
Total.....	—	1,114,220	—	1,255,470	—	1,047,583

7.—ALBERTA.

The coal deposits are of paramount importance among the mineral resources of this province. The coal fields are the most extensive and valuable in Canada. Recent developments include the important increase in the production of bituminous coal. In 1923, the Crowsnest Pass area made a gain of over 500,000 tons over the preceding year, while the Drumheller field showed a decline in the production of lignite. Natural gas is found over wide areas and is being put to extensive industrial use. Petroleum is produced commercially in one locality and showings of oil have been obtained in a number of bore holes in different parts of the province.

11.—Mineral Production of Alberta, 1921-1923.

Products.	1921.		1922.		1923.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		\$		\$		\$
METALLIC—						
Gold, alluvial..... oz.	49	1,013	—	—	—	—
NON-METALLIC—						
Coal..... ton	5,909,217	27,246,514	5,990,911	24,351,913	6,854,397	28,018,303
Natural gas..... M cu. ft.	4,945,884	1,374,599	5,867,459	1,622,105	7,191,670	1,692,246
Petroleum..... bbl.	7,203	49,313	5,608	52,128	1,943	8,227
STRUCTURAL MATERIALS AND CLAY PRODUCTS—						
Clay products.....	—	710,477	—	700,063	—	590,565
Lime..... bush.	107,083	48,332	130,627	71,328	87,753	37,999
Stone..... ton	2,962	13,750	554	7,300	—	—
Other products ¹	—	1,118,231	—	1,067,299	—	940,106
Total.....	—	30,562,229	—	27,872,136	—	31,287,536

¹ Includes cement and sand and gravel.

8.—BRITISH COLUMBIA.

The mountain belt in British Columbia is rich in gold, silver, copper, lead and zinc; its streams have yielded much alluvial gold, and on its flanks are enormous beds of coal of excellent quality. Silver-lead and zinc ores have been extensively mined in the east and west Kootenays, while to the south, at Nelson and Rossland, gold and copper are the principal minerals. Further west, in the area known as the Boundary district, low grade copper ores, carrying gold and silver values, have been found in very large deposits. On the coast, copper ores are mined at Britannia bay and at Anyox. Recently, remarkably rich gold and silver ores have been mined near Stewart on the Portland canal in the northwestern coast district. Coal of excellent quality is produced by the mines of Crowsnest pass, East Kootenay and Vancouver island.

Practically the entire mineral production, exclusive of placer gold, is obtained from that portion of the province near its southern boundary or along the coast, mining development outside of the territory served by transportation facilities being comparatively insignificant. An important smelting industry, producing metallic copper, lead and zinc, has been established at Trail in the southern interior, and a large copper-smelting plant is in operation at Anyox.

Since 1907, British Columbia has occupied second place among the provinces in regard to the value of mineral production. Previous to that time the province held first place so far as magnitude of output was concerned. In 1923 the production was valued at \$43,757,000, which was second only to Ontario with a production of \$80,800,000.

12.—Mineral Production of British Columbia, 1921-1923.

Products.	1921.		1922.		1923.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		\$		\$		\$
METALLIC—						
Arsenic..... lb.	—	—	1,036,000	21,097	1,217,970	41,780
Copper ¹ lb.	34,447,127	4,306,580	31,936,182	4,273,700	55,224,737	7,963,959
Gold..... oz.	150,792	3,117,147	207,370	4,286,718	200,140	4,137,261
Iron ore sold for export..... ton	1,010	3,030	1,255	3,528	243	1,215
Lead..... lb.	60,298,603	3,462,346	87,093,266	5,430,265	99,541,818	7,146,107
Platinum..... oz.	23	1,726	12	1,154	7	816
Silver..... lb.	3,350,357	2,099,133	7,150,937	4,828,384	6,113,327	3,965,899
Zinc..... lb.	53,089,356	2,471,310	56,290,000	3,217,536	60,050,000	3,967,504
NON-METALLIC—						
Coal..... ton	2,890,291	15,676,774	2,927,033	14,622,317	2,823,306	13,813,520
Fluorspar..... "	5,403	134,523	4,219	98,233	75	1,135
Gypsum..... "	40	100	100	500	323	1,615
Magnesium sulphate..... "	2,027	39,386	1,021	24,017	121	6,580
Magnesite..... "	803	7,211	—	—	—	—
Natro-alunite..... "	30	1,500	50	2,500	15	750
Oxides, iron..... "	169	845	3	120	513	6,450
Pyrites..... "	3,597	4,557	6,908	34,540	3,457	13,304
Quartz..... "	22,288	62,317	17,425	37,521	25,590	47,029
Sodium carbonate..... "	197	14,775	202	3,027	265	3,975
Talc..... "	167	4,175	191	4,780	245	5,390
STRUCTURAL MATERIALS AND CLAY PRODUCTS—						
Clay products..... "	—	415,869	—	447,452	—	426,138
Lime—						
Quicklime..... bush.	152,998	234,779	433,716	254,320	690,971	388,494
Hydrated..... "on	1,622	17,851	2,909	30,321	—	—
Stone..... "	142,041	229,165	197,670	324,591	165,098	249,866
Other products ² "	—	925,361	—	1,477,341	—	1,568,601
Total.....	—	33,230,460	—	39,423,962	—	43,757,388

¹Smelter recoveries of copper. ²Includes cement and sand and gravel.

9.—YUKON.

The discovery of the Klondike gold fields, situated near Dawson on the Yukon river, first gave the Yukon district prominence as a mining centre. Placer gold is still the principal mineral product, although the output of silver and lead is increasing. The wide distribution of the ores of gold, copper, silver and lead, characteristic of the Cordilleran region of which the district forms a part, indicates enormous mining possibilities.

13.—Mineral Production of Yukon, 1921-1923.

Products.	1921.		1922.		1923.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		\$		\$		\$
METALLIC—						
Gold..... oz.	65,994	1,364,217	54,456	1,125,705	60,144	1,243,287
Silver..... "	393,092	246,288	663,493	447,997	1,914,438	1,241,953
Lead..... lb.	2,472,615	141,978	3,323,508	207,221	6,771,113	486,093
NON-METALLIC						
Coal..... ton	233	2,472	465	4,650	313	1,485
Total.....	—	1,754,955	—	1,785,573	—	2,972,823

2.—Number of Mines, Capital, Labour, Wages, etc., by Principal Groups.

Annual statistical reports on the mineral production of Canada have been published for many years, first by the Geological Survey, later by the Mines Branch of the Department of Mines, and since 1921, by the Dominion Bureau of Statistics. Previous to the year in question the annual statistics of mines had been confined chiefly to a presentation of the quantity and value production of each of the minerals. The recent treatment has been extended to include a general review of the principal mineral industries such as the copper-gold, silver-lead-zinc and nickel-copper industries, as well as a section on metallurgical works. The additional data include such features as capital employed, numbers of employees, wages and salaries paid and gross and net production. The aim has been to extend the mining statistics beyond a summary of the production of individual minerals by approaching the subject from the standpoint of industrial organization, definitely illustrating the place which mining holds in the scheme of Canadian productive enterprise.

The Mining Industry in 1922.—The scope of mining operations in 1922 responded somewhat to the moderate recovery in business conditions throughout Canada. The number of active operators in 1922 was 1,944, as compared with 1,741 in the preceding year. The number of operating plants and mines also increased from 6,485 in 1921 to 6,761 in the year under review. The operators were requested to report the capital actually invested in the enterprises, including (1) cost of lands, buildings, plant, machinery and tools, (2) cost of materials on hand, supplies, finished products and ore on dump, and (3) cash, trading and operating accounts and bills receivable. It will be observed that no estimate of undeveloped resources was included. The capital employed in 1922 was \$493,695,000, as compared with \$559,514,000 in the preceding year. The employment situation was not greatly altered, the increase being from 60,804 in 1921 to 62,249 in the following year. The salaries and wages declined from \$79,162,000 in 1921 to \$75,027,000 in 1922. The more favourable conditions obtaining in the industry generally were shown by the decline in the total expenditures from \$140,942,000 in 1921 to \$136,723,000 in 1922, while the value of the products increased from \$170,714,000 to \$182,668,000.

1.—Metallic Mineral Industries.

The metal-mining and milling section included in 1922, 400 active operators working 423 mines, while 8 metallurgical companies operated 13 plants. More than 13,000 employees were engaged in the metallic group, receiving a remuneration of \$18,362,000 in salaries and wages. The capital employed was \$165,975,000, and the net value of bullion, concentrates or residues shipped from the mines and products made by the smelters was valued at \$60,157,000.

Employment and Number of Operators.—The placer-mining operations carried on throughout the various parts of the Yukon camp were satisfactory to the operators, resulting in an output of 67,962 crude ounces of recovered gold. The wage earners numbered 374, receiving \$514,196 in salaries and wages for six to eight months' activity. There were 74 auriferous quartz mines operating, of which 46 produced bullion or shipped ores, while 28 carried on development work only. The provinces in order of importance, with the number of operating mines in each, were Ontario, 41; British Columbia, 18; Nova Scotia, 11; and Manitoba, 4. The employees numbered 5,441, of whom 2,780 were working underground.

The copper-gold-silver industry was not so active in 1922 as in the preceding year, as four mines shipped to Canadian smelters and five mines to foreign smelters, as compared with ten mines shipping to Canadian smelters and six mines shipping to foreign smelters in 1921. The number of employees dropped from 1,222 to 826, while the salaries and wages paid to them declined from \$1,576,461 to \$1,150,275.

Three companies were engaged in mining and smelting nickel-copper ores, obtained in the vicinity of Sudbury, Ontario. Employees in the mines, smelters and refineries numbered 1,697, \$1,512,326 receiving in wages and salaries.

The producing properties in the silver-cobalt mining industry totalled 20 in number; ore mined increased from 398,931 tons in 1921 to 426,445 tons in 1922, while the wages paid, notwithstanding the increased tonnage, fell from \$1,440,144 to \$1,176,279.

The silver-lead-zinc industry showed large increases both in number of mines operated and in the quantities of ores raised and shipped. The greatest activity was observed in the Kootenay section of British Columbia, where Canada's most important lead-zinc mines are situated. The Yukon territory was represented by two mines, both in the Mayo district, while Ontario again had one active shipping property. The employees in 1922 numbered 994, with remuneration of \$1,370,645, while in 1921, the 761 employees received \$964,571.

The metallurgical section is designed to include the smelting and refining plants operated in conjunction with mines, as well as similar plants operated independently, in which the reduction of ores either by fire or by electricity was carried on for the production of non-ferrous metals. The list consisted of plants at Trail and Anyox in British Columbia; of plants at Copper Cliff, Port Colborne, Coniston, Sudbury, St. Catharines, Deloro and Galetta in Ontario, and the Deschenes plant in Quebec. The decline in the capital employed by the metallurgical works was from \$82,687,000 in 1921 to \$63,160,551, the greater part of this decrease being due to a reduction in the materials on hand and in working capital. Employees increased from 3,298 to 3,384, and salaries and wages from \$4,407,000 to \$5,043,000. The estimated cost of ores and concentrates treated in the smelters was \$7,172,000, while the products made by the metallurgical industry were valued at \$23,637,205.

2.—Non-Metallic Minerals.

The non-metallic minerals group, consisted of fifteen industries of which the coal and asbestos mining were of chief interest, while the natural gas, gypsum and salt-producing industries were also of importance. The group consisted of 742 active concerns, operating 5,516 wells and mines. The employees numbered 37,958, receiving a remuneration of \$45,226,000. The capital employed was \$232,900,000 and the aggregate value of production was \$83,000,000.

Coal Mining.—There were 509 coal mines operated in Canada during 1922, of which 357 were in Alberta, 59 in Saskatchewan, 57 in Nova Scotia, 19 in New Brunswick, 16 in British Columbia and 1 in the Yukon. The total capital employed was in excess of \$140,000,000, of which \$59,200,000 was invested in Nova Scotia, \$47,300,000 in Alberta and \$29,300,000 in British Columbia. The average number of wage earners employed throughout the year was 30,096. Earnings per man-day were \$5.18 as compared with \$6.20 in the previous year, and the total wages amounted to \$35,773,000 or approximately \$7,000,000 dollars less than the 1921 total of \$42,758,471.

Asbestos.—The asbestos industry was represented by 12 firms operating 15 mines at which there were mills for the grading of the product. The amount of capital employed was \$44,000,000, an increase of \$2,640,000 over the total reported for the preceding year. Employment was furnished to 2,572 persons, including 154 salaried employees, and the total disbursement in salaries and wages amounted to \$2,581,644.

Other Non-metallic Industries.—Other industries of importance from the standpoint of employment furnished were (1) gypsum-mining with 1,055 employees, (2) natural gas production with 921 employees, and (3) salt-mining with an average employment of 371 men.

3.—Structural Materials and Clay Products.

The average number of employees in the group in 1922 was 11,153, the salary and wage account being \$11,400,000. The average number on the payrolls of the cement industry decreased from 2,751 employees in 1921 to 1,753 in 1922. The chief division of the clay products industry consisted of 216 establishments actively engaged in the manufacture of brick and tile. In the whole industry, the average yearly wage for all workers was \$1,015, there having been a total of 4,681 employees to whom \$4,752,341 was paid.

14.—Summary of Principal Statistics Relative to the Mining, Metallurgical, Structural Materials and Clay Products Industries Operating Plants in Canada, 1922.

Groups.	Number of active operators.	Number of operating plants or mines.	Capital employed.	Number of employees.	Salaries and wages paid.	Total operating expenditures.	Net value of bullion, ore, concentrates or residues shipped from the mines, and products made by the smelters.
			\$		\$	\$	\$
METALLIC—							
Auriferous quartz mining and milling.....	79	79	35,368,094	5,441	8,011,682	15,748,651	26,082,169
Silver-cobalt mining and milling.....	26	30	29,459,603	1,403	1,532,736	3,902,164	8,222,303
Silver-lead-zinc mining and milling.....	75	91	6,828,980 ¹	994	1,371,645	2,605,770	4,173,812
Copper-gold-silver mining and milling.....	18	18	6,519,516 ²	826	1,150,275	1,612,999	2,031,671
Placer mining.....	200	200	10,703,650 ³	650 ⁴	670,500 ⁵	670,500	1,460,347
Nickel-copper mining and milling.....	2	5	8,455,183	440	582,042	1,196,679	1,557,414
Iron mining and briquetting	—	—	5,479,766	—	—	—	56,993
Iron blast furnaces.....	—	—	—	—	—	—	106,980 ⁶
Metallurgical works.....	8	13 ⁴	63,160,551	3,384	5,042,787	14,214,987 ⁷	16,465,205
Total.....	498	436	165,975,343	13,138	18,361,667	39,951,750	60,156,894

¹ Excluding capital invested by Consolidated Mining and Smelting Company, Trail, and Kingdon Smelter, Galetta.

² Excluding capital invested by Granby Consolidated Mining, Smelting and Power Company, Anyox.

³ Estimate. Incorporated companies in Yukon Territory paid \$514,196 in wages; also includes estimate for wages paid in British Columbia.

⁴ Includes 2 silver smelters, South Ontario; 5 plants: nickel-copper smelters and refineries in Ontario and Quebec; 6 plants: copper, lead and zinc smelters, Ontario and British Columbia, and refineries in British Columbia and Ontario.

⁵ Does not include cost of ores, concentrates and residues treated.

⁶ Represents value of pig iron made from Canadian ore, deducting the net value of ores treated.

⁷ Includes production of Yukon Territory, 82,394 crude ounces valued at \$16.12 per oz., and production for British Columbia valued at \$364,800.

⁸ Incorporated companies of Yukon Territory.

14.—Summary of Principal Statistics Relative to the Mining, Metallurgical, Structural Materials and Clay Products Industries Operating Plants in Canada, 1922—concluded.

Groups.	Number of active operators.	Number of operating plants or mines.	Capital employed.	Number of employees.	Salaries and wages paid.	Total operating expenditures.	Net value of bullion, ore, concentrates or residues shipped from the mines, and products made by the smelters.
Non-METALLIC—			\$		\$	\$	\$
Asbestos.....	12	15	43,997,252	2,572	2,581,644	5,552,068	5,552,723
Coal-mining.....	349	509	140,466,108	31,838	39,550,627	60,169,303	65,518,497
Feldspar.....	25	25	388,310	225	127,182	193,242	248,402
Fluorspar.....	4	4	323,337	52	25,580	69,252	102,138
Grindstones.....	3	3	259,666	40	31,199	60,522	43,742
Gypsum.....	13 ⁹	14	4,092,090	1,055	909,072	1,473,023	2,160,898
Magnesite.....	3	3	1,835,938	132	58,578	115,364	76,294
Mica.....	20	20	441,802	147	64,641	112,273	152,263
Natural gas.....	132	1,981 ⁹	31,373,817	921	939,194	2,397,869	5,846,501
Oxides, iron.....	4	4	217,428	49	44,839	115,198	110,608
Petroleum.....	120	2,880 ⁹	2,764,099	160	167,176	283,854	611,176
Quartz.....	9	9	707,180	151	74,412	130,879	208,598
Salt.....	10	11	2,205,184	371	432,261	1,208,366	1,628,323
Talc.....	7	7	594,019	81	88,509	141,472	188,458
All other non-metallic.....	311 ⁹	31	3,222,539	164	130,986	200,612	528,173
Total.....	742	5,516	232,888,769	37,958	45,225,900	72,223,297	82,976,794
STRUCTURAL MATERIALS AND CLAY PRODUCTS—							
Clay products.....	227	232	31,168,903	4,681	4,752,341	9,209,143	11,438,456
Cement.....	6	11	41,573,737	1,753	2,315,240	7,748,848	15,438,481
Lime.....	57	62	4,984,910	1,110	1,013,486	2,260,876	3,165,005
Sand and gravel ¹¹	342	342	4,098,928	750	684,626	1,228,917	3,502,935
Stone.....	162	162	13,004,233	2,859	2,673,241	4,099,932	5,989,864
Total.....	794	809	94,830,711	11,153	11,438,934	24,547,716	39,534,741
SUMMARY BY CLASSES—							
Metallic.....	408	436	165,975,343	13,138	18,361,667	39,951,750	60,156,894
Non-metallic.....	742	5,516	232,888,769	37,958	45,225,900	72,223,297	82,976,794
Structural materials and clay products.....	794	809	94,830,711	11,153	11,438,934	24,547,716	39,534,741
Total.....	1,944	6,761	493,694,823	62,249	75,026,501	136,722,763	182,668,429

⁹ Number of wells.

¹⁰ Includes actinolite, barytes, chromite, corundum, magnesite sulphate, manganese, mineral waters, peat, pyrites, sodium sulphate, and tripolite.

¹¹ Does not include railway ballast operators.

15.—Summary of Principal Statistics Relative to the Mining, Metallurgical, Structural Materials and Clay Products Industries, by Provinces, 1922.

Provinces.	Number of active operators.	Number of operating plants or mines.	Capital employed.	Number of employees.	Salaries and wages paid.	Total expenditures.
			\$		\$	\$
Nova Scotia.....	83	119	64,407,944	15,672	13,912,093	23,964,567
New Brunswick.....	48	83	2,736,220	1,235	1,068,194	1,624,156
Quebec.....	164	169	77,191,610	6,288	6,073,236	12,647,419
Ontario.....	871	5,429	175,931,022	15,324	18,688,145	42,336,657
Manitoba.....	32	33	5,714,508	638	651,585	1,410,932
Saskatchewan.....	71	81	4,202,597	587	577,117	741,366
Alberta.....	306	453	65,918,600	10,343	16,131,521	24,139,974
British Columbia.....	246	271	85,600,408	11,680	17,121,493	28,972,051
Yukon.....	123	123	11,991,914	482	803,117	885,641
Canada.....	1,944	6,761	493,694,823	62,249	75,026,501	136,722,763

3.—Metallic Minerals.

1.—Gold.

Canada has been a gold-producing country for over 60 years. The discovery of gold in paying quantities was an epoch-making event in the history of British Columbia. In the late fifties, placer gold was discovered along the Thompson river, and in 1858 the famous Fraser river rush took place, attracting the attention of the mining world to British Columbia. The extraordinarily rich deposits of Williams and Lightning creeks in the Cariboo district were discovered in 1860, and three years later the area had a record production of placer gold valued at \$4,000,000. In the northern part of the province, the Atlin division of the Cassiar district was discovered in 1892.

The discovery of gold in the Yukon river was reported in 1869, and bar mining on the tributaries of the Yukon was conducted with increasing profit between 1881 and 1886. Ten years later rich discoveries were made in creeks of the Klondike river, a right bank tributary joining the Yukon at what is now Dawson City; and one of the greatest rushes in history was made to this locality. The richest streams in the district were Bonanza creek and its principal tributary, the Eldorado.

Gold was discovered in Nova Scotia in 1860. Two years after the discovery, gold valued at nearly \$142,000 was recovered from the quartz veins; a steady, though in recent years declining, output has been reported since that time.

Although gold was first discovered during 1866 in Hastings county, no permanent gold industry was established in Ontario until recent years. Gold has been found and worked at many points in Ontario from the lake of the Woods in the west to the Hastings district in the east, a distance of roughly 650 miles. The gold production of the province during the last decade has increased greatly, the Porcupine area having been the principal producer since 1912.

Gold production in Canada attained its maximum in 1900, when the Yukon production reached its highest point, and 1,350,057 ounces of fine gold were produced. For the provinces the years in which the greatest yields were obtained were as follows: Nova Scotia, 1902; Quebec, 1881; Ontario, 1922; Alberta, 1896; and British Columbia, 1913. The quantity and value of gold produced in Canada is given for 1911 and subsequent years in Tables 16 and 17. Preliminary figures for the first half of 1924 show a production of 700,264 oz., valued at \$14,475,741, as compared with 530,402 oz., valued at \$10,964,382, in the first half of 1923.

16.—Quantity of Gold produced in Canada, by Provinces, calendar years 1911-1923.

Years.	Nova Scotia.	Quebec.	Ontario.	Manitoba.	Alberta.	British Columbia.	Yukon Territory.	Total.
	Oz. fine.	Oz. fine.	Oz. fine.	Oz. fine.	Oz. fine.	Oz. fine.	Oz. fine.	Oz. fine.
1911.....	7,781	613	2,062	—	10	238,496	224,197	473,159
1912.....	4,385	642	86,523	—	73	251,815	268,447	611,885
1913.....	2,174	701	219,801	—	—	297,459	282,838	802,973
1914.....	2,904	1,299	268,264	—	48	252,730	247,940	773,178
1915.....	6,636	1,099	406,577	—	195	273,376	230,173	918,056
1916.....	4,562	1,034	492,481	—	82	219,633	212,700	930,492
1917.....	2,210	1,511	423,261	440	—	133,742	177,667	738,831
1918.....	1,176	1,939	411,976	1,926	27	180,163	102,474	699,681
1919.....	850	1,470	505,739	724	24	167,252	90,705	766,764
1920.....	690	955	564,995	781	—	124,808	72,778	765,007
1921.....	439	635	708,213	207	49	150,792	65,994	926,329
1922.....	1,042	—	1,000,340	156	—	207,370	54,456	1,263,364
1923.....	655	667	971,704	31	—	200,140	60,144	1,233,341

NOTE.—For the years 1862 to 1910, see Canada Year Book, 1916-17, pp. 268 and 269.

17.—Value of Gold produced in Canada, by Provinces, calendar years 1911-1923.

Years.	Nova Scotia.	Quebec.	Ontario.	Manitoba.	Alberta.	British Columbia.	Yukon Territory.	Total.
	\$	\$	\$	\$	\$	\$	\$	\$
1911.....	160,854	12,672	42,625	—	207	4,930,145	4,634,574	9,781,077
1912.....	90,638	13,270	1,788,596	—	1,509	5,205,485	5,549,296	12,648,794
1913.....	44,935	14,491	4,543,690	—	—	6,149,027	5,846,780	16,598,923
1914.....	60,031	26,708	5,545,509	—	992	5,224,393	5,125,374	15,983,007
1915.....	137,180	22,720	8,404,693	—	4,026	5,651,184	4,758,098	18,977,901
1916.....	94,305	21,375	10,180,485	—	1,695	4,540,216	4,396,900	19,234,976
1917.....	45,685	31,235	8,749,581	9,095	—	2,764,693	3,672,703	15,272,992
1918.....	24,310	40,083	8,516,299	139,638	558	3,624,476	2,118,325	14,463,689
1919.....	17,571	30,388	10,454,553	14,966	500	3,457,406	1,875,039	15,850,423
1920.....	14,263	19,742	11,679,483	16,145	—	2,580,010	1,504,455	15,814,098
1921.....	9,075	13,127	14,640,062	4,279	1,013	3,117,147	1,364,217	19,148,920
1922.....	21,540	—	20,678,862	3,225	—	4,286,718	1,125,705	26,116,050
1923.....	13,540	13,788	20,086,904	641	—	4,137,261	1,243,287	25,495,421

NOTE.—For the years 1862 to 1910, see Canada Year Book, 1916-17, p. 270.

With the exception of the years 1891 and 1893, when its output was surpassed by that of Nova Scotia, British Columbia was the chief gold-producer for a period of thirty-nine years, or up to 1897, when its production was outstripped by that of the Yukon. The latter district held first place until 1907, when British Columbia regained the first rank and continued to lead during the next seven years with the exception of 1912, when the Yukon was again in the ascendancy. As a result of the development of the Porcupine and contiguous areas, Ontario passed the other provinces and mining districts in 1914, and still holds the first place, so far as the production of gold is concerned.

Ontario.—Though gold was known to exist in various parts of the province, the production of the metal was comparatively small until 1912, when the first permanent camp was established in the Porcupine area. The total recorded production of gold in Ontario for the period 1887-1912 was 210,040 fine oz., of which more than 40 p.c. was obtained in the year 1912. The production rose from 219,801 fine oz. in 1913 to 492,481 fine oz. in 1916, but fell during the next two years, owing to scarcity of labour. The yield rose to 1,000,340 fine oz. in 1922, declining to 971,304 in 1923. In the first half of 1924, however, 571,418 fine oz. were produced as compared with 418,113 fine oz. in the first half of 1923.

Porcupine Area.—The Porcupine district, the most important gold-mining area of Canada, lies about 150 miles northwest of Cobalt, the present productive portion being limited to the township of Tisdale with an area six miles square.

The gold deposits seem to be generically related to the porphyries which have intruded the older Keewatin greenstones and also the Timiskaming sediments. Rocks of these series are widely distributed throughout the Porcupine district and it is in them that the gold-bearing deposits are found. The theory of deposition is that the intrusion of porphyry fissured the older rocks and opened a way for the circulation of the mineral-bearing siliceous solution which filled the fissures. The application of this theory in the search for new ore bodies has been attended with great success.

The ore bodies themselves are generally lens-shaped fissures filled with quartz veinlets and other highly siliceous matter. Iron pyrite is always present. Mineralized schist on the walls of the veins invariably carries gold values, and as much of this as it is profitable to work is broken down. The irregularity of the ore bodies requires a tremendous amount of sampling before breaking ore. The lenses are of irregular shape, varying from only a few feet in length and width to hundreds of feet in length and as much as 30 or 40 feet in breadth. There are also irregular dome-like masses of quartz which are roughly elliptical or oval in surface outline.

Ordinarily from 95 to 97 p.c. of the gold in the ores mined at the Porcupine field is extracted chemically by dissolving it in a weak solution of sodium cyanide, the details of the process varying at the different mines. There are five steps in the cyanide process, which are briefly as follows: (1) reducing the ore to a size where the gold particles are freed from enclosing rock, carried to a point where the ore is ground about as fine as cement, (2) dissolving the gold in sodium cyanide solution, (3) separating the solution containing the dissolved gold from the impoverished ore, (4) precipitation of gold from solution by zinc dust, and (5) refining of the precipitates.

Kirkland Lake.—Of the other gold-producing localities, Kirkland lake in Timiskaming district has been the most important. The first gold discovery in the vicinity of Kirkland lake was made in 1911 on a claim now forming part of the Wright-Hargreaves mine. The geological formation is similar, as regards age relationship, to that of the Porcupine district. The rocks are pre-Cambrian, the Keewatin predominating. Unlike the Porcupine, most of the productive veins are found within the porphyry, which is of syenitic variety. Three principal zones of mineralization have been indicated by exploration: (1) the main or central zone, which runs in a northeasterly direction along the southern expanse of the lake, and along which a group of important mines is being developed over a length of $2\frac{1}{4}$ miles and a width of half a mile; (2) a southerly zone which lies about three-quarters of a mile to the south; and (3) a northerly zone known as the Goodfish Lake gold area.

British Columbia.—The production of gold in British Columbia has varied considerably at different periods. Rapid increases took place between 1858 and 1863, when 189,318 fine oz. were won by placer mining. Thereafter a decline occurred until 1893, when a low level of 18,360 fine oz. was reached. Then the introduction of lode mining resulted in a rapidly increasing production until 1902, when previous records were surpassed by an output of more than 288,000 fine oz. With the exception of the maximum output of 297,459 fine oz. in 1913, the record of 1902 has not been equalled. Recent developments, including the increase of 17.8 p.c. in the production of 1922 over that of 1921, indicate more favourable conditions in the gold mining industry of the province. Though the bulk of the gold obtained in the Cordilleran region has been derived from the placer deposits of the central portion of the region from the Klondike on the north almost to the international boundary on the south, yet a large amount, averaging 178,039 fine oz. between 1913 and 1921, was obtained by lode mining, largely of the copper-gold ores of the Rossland and Yale boundary districts. The metals recovered from the Rossland ores are gold, silver and copper, with gold the most important. The more important copper-gold mines are owned and operated by the Consolidated Mining and Smelting Co. of Trail. The copper concentrates of the Britannia mine also contain gold, as does the blister copper made at Anyox. The output of gold in

British Columbia has been in part maintained by the successful operation of the Premier silver mine on the Portland canal, while the Nickel Plate property, operated by the Hedley Gold Mining Co., has been a consistent producer of gold bullion as well as arsenical gold concentrates, which are exported to United States for treatment. The IXL mine also exports high grade gold ore.

World's Production.—A sketch of the development of the gold-mining industry since the discovery of America may take the form of a reference to four successive periods. During the first period, extending from 1493 to 1760, the annual production averaged nearly 337,000 fine oz. The placer mining of Brazil and Colombia swelled the average output of the last sixty years of the period to about 606,000 oz. per year.

The production of Russia from placer mining was a considerable factor in the records of the next period, extending from 1761 to 1840, the country retaining first rank among the world's producers until 1837. The annual average production during the period was 5,655,000 oz.

The third period, extending from 1841 to 1890, was characterized by the remarkable discoveries of gold in California and Australia in 1848 and 1851 respectively. The annual average during the fifty years was 4,937,000 oz. For the first decade the average was 1,761,000 oz. and for the second 6,448,000, while the last decade shaded off to 5,201,000. The production of the period was contributed chiefly by the United States, Australia and Russia.

In the fourth period, extending from 1891 to the present time, the outstanding features were the entry of South Africa, an important and then the leading producer, and the phenomenal increase in the output of most of the gold-producing countries through the introduction of the cyanide process. The output was 6,320,000 fine oz. in 1891, and a steady increase was recorded until 1915, when a maximum of 22,675,000 oz. were produced. The activity in many of the large gold-fields having declined after 1915, a decreasing output was recorded for each year between 1915 and 1922, the production of the latter year being 15,440,000 oz. The Anglo-Boer war caused the only serious recession in the output of South Africa between 1888 and 1916, when the record yield of 9,296,000 fine oz. was obtained, this representing 42.3 p.c. of the world's total production of gold in that year. The output in 1922 was slightly in excess of 7,009,000 oz., forming 45.4 p.c. of the world's production.

The yield of gold in the United States is derived from placer mining, gold-quartz mining and milling, and recoveries at copper and other base metal refineries. The maximum output was attained in 1915, when 4,888,000 oz. were produced, the output in 1922 dropping to 2,363,000 oz., owing chiefly to the fact that the price of gold in the country remained fixed throughout the period, while higher operating costs obtained.

Canada occupied in 1921 the third place among the world's gold producers, the output being 926,329 fine oz. or 5.8 p.c. of the total production of the year. The same relative position was retained in 1922, and the percentage increased to 8.2, the Canadian production being 1,263,364 fine oz., as compared with the world estimate of 15,440,243 fine oz.

For detailed statistics of the gold production of the world for 1921 and 1922 see Table 18 of this section.

18.—Quantity and Value of the World's Production of Gold and Silver for calendar years 1921 and 1922.

(From the Annual Report of the Director of the United States Mint.)

Countries.	1921.				1922.			
	Gold.		Silver.		Gold.		Silver.	
	fine oz.	\$	fine oz.	\$	fine oz.	\$	fine oz.	\$
North America—								
United States...	2,422,006	50,067,307	53,052,441	33,485,109	2,363,075	48,849,096	56,240,048	33,206,114
Canada.....	926,329	19,148,920	13,134,926	8,290,371	1,263,364	26,116,052	18,581,439	12,623,115
Mexico.....	684,634	14,152,641	64,465,347	40,688,593	748,291	15,468,548	81,076,899	55,078,781
Total.....	4,032,969	83,368,868	130,652,714	82,464,073	4,374,730	90,433,696	155,898,386	105,908,010
Central American States and West Indies.....	120,937	2,500,000	2,000,000	1,262,340	120,937	2,500,000	2,000,000	1,358,680
South America—								
Argentina.....	3,628	75,000	25,000	15,779	3,628	75,000	25,000	16,984
Bolivia.....	290	6,000	2,400,000	1,514,808	16,011	330,977	6,420,677	4,361,823
Brazil.....	134,482	2,780,000	33,000	20,829	146,668	3,031,897	—	—
Chile.....	45,139	933,105	2,558,947	1,615,130	79,828	1,650,191	2,709,152	1,840,465
Colombia.....	290,250	6,000,000	500,000	315,585	290,250	6,000,000	500,000	339,670
Ecuador.....	36,259	749,536	75,000	47,338	36,259	749,536	75,000	50,951
Guiana—								
British.....	12,828	265,178	—	—	10,877	224,848	—	—
Dutch.....	11,285	233,282	9,000	5,681	12,024	248,558	9,000	6,114
French.....	48,375	1,000,000	—	—	48,375	1,000,000	—	—
Peru.....	77,385	1,599,690	10,008,553	6,317,098	81,436	1,683,432	13,169,765	8,946,748
Uruguay.....	339	7,000	2,000	1,262	339	7,000	2,000	1,358
Venezuela.....	30,253	625,385	2,700	1,704	17,361	358,884	2,700	1,834
Total.....	690,513	14,274,176	15,614,200	9,855,214	743,056	15,360,323	22,913,294	15,565,917
Europe—								
Austria.....	161	3,328	10,513	6,635	547	11,307	8,584	5,831
Czecho-Slovakia	11,413	235,928	703,056	443,748	9,645	199,380	900,200	611,542
France.....	96	1,984	321,500	202,921	96	1,984	321,500	218,403
Germany.....	4,180	86,409	3,387,420	2,138,038	5,433	112,310	5,372,587	3,649,813
Great Britain.....	—	—	11,317	7,143	—	—	27,649	18,783
Italy.....	—	—	199,330	125,811	—	—	355,800	262,089
Norway.....	—	—	196,115	123,782	—	—	194,765	132,312
Rumania.....	41,409	856,000	96,450	60,876	42,985	888,579	109,246	74,215
Russia and Siberia.....	43,177	892,548	40,000	25,247	146,508	3,028,589	150,000	101,901
Spain.....	—	—	2,679,349	1,691,125	904	18,692	2,778,210	1,887,349
Sweden.....	64	1,323	13,342	8,421	32	661	32	22
Turkey.....	—	—	100,000	63,117	—	—	125,000	84,917
Yugoslavia.....	3,987	82,419	15,946	10,065	6,944	143,545	26,813	18,215
Total.....	104,487	2,159,939	7,774,338	4,906,929	213,094	4,405,047	10,400,386	7,065,392
Australasia—								
New South Wales.....	51,173	1,057,840	4,241,890	2,677,354	25,222	521,385	9,912,927	6,734,248
Northern Territory.....	490	10,129	—	—	500	10,336	—	—
Queensland.....	40,376	834,646	195,368	123,285	79,382	1,640,972	400,000	271,736
South Australia.....	2,660	54,987	1,449	914	1,000	20,672	2,512	1,706
Victoria.....	104,512	2,160,455	5,204	3,285	109,273	2,258,873	6,978	4,740
West Australia.....	553,731	11,446,636	116,151	73,311	538,245	11,126,512	200,000	135,868
New Zealand.....	5,340	110,388	348,658	220,062	3,357	69,395	794,585	539,793
Tasmania.....	9,289	192,021	—	—	9,289	192,021	—	—
Papua.....	135,720	2,805,581	453,567	286,278	144,117	2,979,163	376,170	255,547
Total.....	903,291	18,672,683	5,362,247	3,384,489	910,385	18,819,329	11,693,172	7,943,638

NOTE.—The figures for Canada given here are as they appear in the Report of the Director of the United States Mint, 1922. Revised figures for Canada's silver production are as follows:—1921, 13,543,198 oz., value, \$8,485,355; 1922, 18,626,439 oz., value, \$12,576,758.

18.—Quantity and Value of the World's Production of Gold and Silver for calendar years 1921 and 1922—concluded.

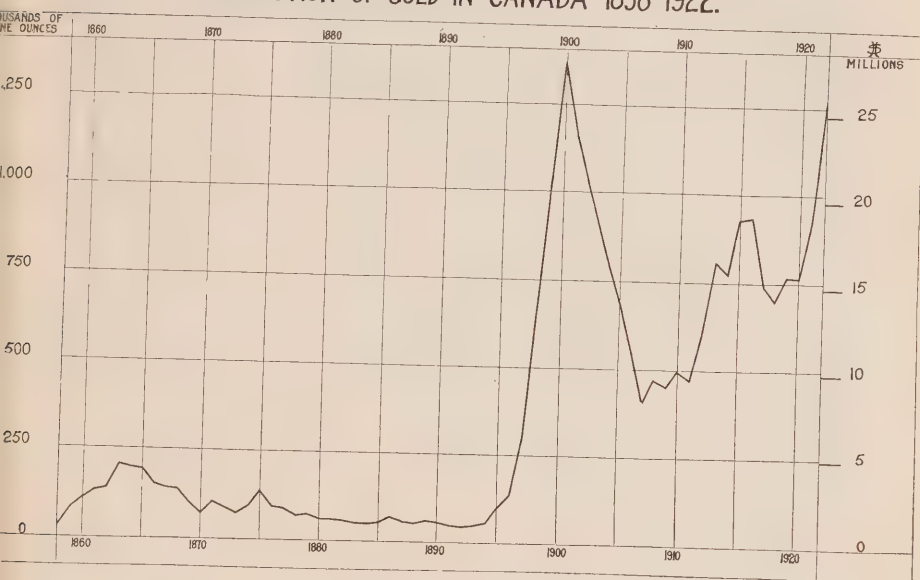
(From the Annual Report of the Director of the United States Mint.)

Countries.	1921.				1922.			
	Gold.		Silver.		Gold.		Silver.	
	fine oz.	\$	fine oz.	\$	fine oz.	\$	fine oz.	\$
Asia—								
British India....	432,723	8,945,178	3,587,587	2,264,377	438,015	9,054,574	4,244,304	2,883,325
China.....	100,000	2,067,183	40,000	25,247	100,000	2,067,183	40,000	27,174
Chosen (Korea).....	130,893	2,705,796	2,958	1,867	127,892	2,643,764	10,835	7,361
East Indies:—								
British.....	24,188	500,000	—	—	29,025	600,000	—	—
Dutch.....	94,168	1,946,625	1,021,994	645,052	104,295	2,155,969	1,109,657	753,834
Federated Malay States.....	13,386	276,719	—	—	15,005	310,181	—	—
Indo-China.....	160	3,307	—	—	160	3,307	—	—
Japan.....	237,106	4,901,416	4,187,666	2,643,129	233,809	4,833,261	3,886,301	2,640,120
Sarawak.....	17,091	353,302	3,437	2,169	1,097	22,677	453	308
Taiwan (Formosa).....	28,455	588,217	26,525	16,742	28,356	586,171	25,000	16,983
Total.....	1,078,170	22,287,743	8,870,167	5,598,583	1,077,654	22,277,087	9,316,550	6,329,105
Africa—								
Belgian Congo....	65,715	1,358,450	5,819	3,673	68,351	1,412,941	6,559	4,456
British West Africa—								
Gold Coast, Ashanti and Nigeria.....	203,606	4,208,910	—	—	213,395	4,411,266	—	—
Egypt and Abyssinia.....	30,000	620,155	—	—	32,150	664,600	—	—
Eritrea.....	64	1,323	—	—	64	1,323	—	—
French West Africa—								
Guinea, Senegal and Ivory Coast.....	8,584	177,447	—	—	8,584	177,447	—	—
Madagascar.....	14,660	303,049	12,860	8,117	578	11,948	12,860	8,736
Portuguese East Africa....	6,015	124,341	502	317	11,735	242,584	502	341
Rhodesia—								
Northern.....	1,383	28,589	8,867	5,597	2,505	51,783	7,190	4,884
Southern.....	585,525	12,103,876	152,989	96,562	652,791	13,494,388	177,209	120,385
Tanganyika Territory.....	321	6,646	—	—	376	7,773	—	—
Transvaal, Cape Colony and Natal.....	8,128,722	168,035,597	830,839	524,401	7,009,858	144,906,625	1,115,676	757,923
Total.....	9,044,595	186,968,383	1,011,876	638,667	8,000,387	165,382,678	1,319,996	896,725
Total for the World.....	15,974,962	330,231,792	171,285,542	108,110,295	15,440,243	319,178,160	213,541,784	145,087,467

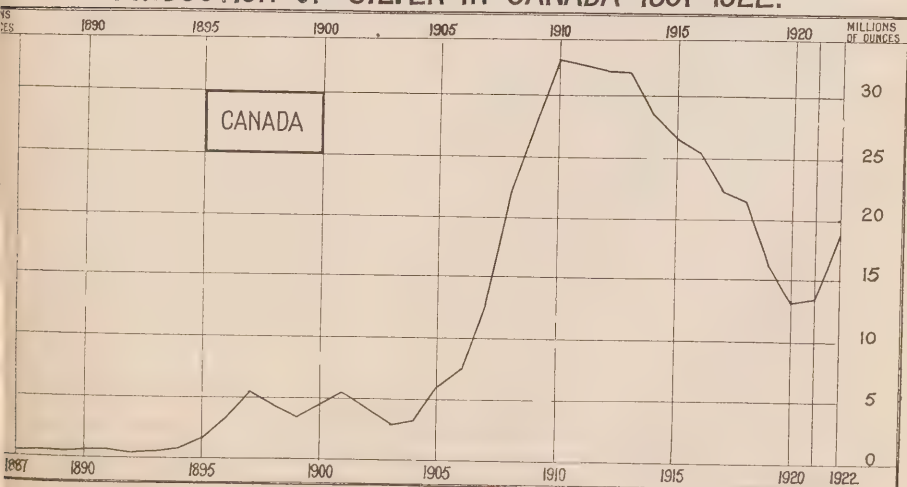
2.—Silver.

The annual production of silver in Canada from 1887 to 1894 was less than 1,000,000 oz. As a result chiefly of the discovery of the silver-lead ores of British Columbia, it ranged from 3,000,000 to 4,000,000 oz. from 1895 to 1903. In the latter year silver-mining commenced on a small scale in the Cobalt area of Ontario, the output of which rose rapidly to more than 31,500,000 oz. in 1911. In spite of the falling off in the output since that time, Canada still retains its place as the third largest producer of silver in the world.

PRODUCTION OF GOLD IN CANADA 1858-1922.



PRODUCTION OF SILVER IN CANADA 1887-1922.



The silver production of Canada is chiefly credited to the rich silver-cobalt ores of northern Ontario and the silver-lead mines of British Columbia. The phenomenal development of the silver district of Cobalt and Gowganda placed the region in the first position among the silver camps of the world. An important addition to the output is contributed by the gold-copper ores of British Columbia. A certain amount was also produced until recently by the copper-sulphur ores of Quebec. The Yukon has been a steady producer of silver since 1899; its total output until December, 1922, was reported as 3,822,187 oz.

Ontario.—*Cobalt.*—The silver-bearing veins of Cobalt, lying about 100 miles north of North Bay, were discovered in 1903. The maximum production of the camp was reached in 1911, when 31,507,791 oz. were reported. The output dropped to 8,279,320 oz. in 1921. The tonnage of ores shipped in 1923 from the mines of the camp for treatment was 150,272, with a silver content of 7,514,871 fine oz. Most of the ore in the Cobalt area has come from veins or parts of veins that originally lay beneath the diabase sill or in the footwall. Merchantable ore has not been found at as great a distance beneath the sill as above it and unfortunately, little of the hanging wall remains, erosive agencies having removed it together with much of the sill and the footwall. The exploration of the lower contact of the diabase sill, undertaken by the Colonial and Coniagas companies in 1923, may have important results, since the sill extends over a large area.

Gowganda.—Silver was discovered in 1908 near Miller, Calcite and Gowganda lakes in the vicinity of the village of Gowganda, 56 miles to the northwest of Cobalt. The greatest production was in 1917, when 1,064,635 oz. were reported, and the total quantities shipped from 1908 to 1920 were 5,877,592 oz. The shipment of ore from Gowganda and Elk Lake in 1923 was 73 tons with silver values of 160,328 fine oz. The production of silver in the Gowganda area has been chiefly from veins in the diabase and, as far as can be judged at present, mostly from the upper part of the sill where it has been exposed by erosion of the overlying rocks, and also where it dips gently under the Keewatin rocks as at the Miller Lake O'Brien mine.

South Lorrain.—The success of the Keeley mine, which is now being developed by an English company, has tended to renew general interest in South Lorrain. The area first attracted attention in 1907, when native silver was discovered on a claim since known as the Keeley mine, and the Wettlaufer in a few years produced more than 3,000,000 oz. of silver. The camp shipped in 1923, 2,012 tons of ore with a silver content of 3,000,116 fine oz.

British Columbia.—Until recently, about 75 p.c. of the metal produced in the province came from the silver-lead-zinc ores of the East and West Kootenay districts. The remainder was chiefly derived from the copper-gold ores of the Rossland, Boundary and Southern Coast districts, as well as from the Premier gold mine, near Stewart and the Dolly Varden silver mine at Alice Arm. The Slocan division was by far the largest producer of silver in British Columbia from 1913 to 1920, accounting for nearly 47 p.c. of the total shipments. The total silver yield of the Premier mine in 1921 was 1,200,000 oz., which was increased to more than 4,000,000 oz. in 1922, while the Dolly Varden mine produced 831,638 oz. in 1920 and 45,647 oz. in the following year.

Yukon Territory.—Production in the Yukon has been obtained chiefly from the gold bullion won by the mining of alluvial deposits. Shipments of high grade silver-lead ores from the Silver King property in the Mayo district accounted for the increase of production from lode mines in 1915 to 1918. The output of the Keno Hill mine of the same district swelled the production in 1921, 1922 and 1923.

World Production of Silver.—The world production of silver was estimated at 213,541,784 fine oz. for 1922, which is a slight increase from the pre-war figure of 1913, given as 208,690,446 fine oz. The silver production of Canada in 1922 was 18,626,439 fine oz. For the quantity and value of the world's production in 1921 and 1922, see Table 18 of this section.

Statistics of the quantity and value of silver produced in Canada are given for the years since 1887 in Table 19, while statistics of the quantity and value produced in the various provinces are given for 1911 and subsequent years in Table 20.

19.—Quantity and Value of Silver Produced in Canada during the calendar years 1887-1923.

Years.	Quantity.	Value.	Years.	Quantity.	Value.	Years.	Quantity.	Value.
	Oz.	\$		Oz.	\$		Oz.	\$
1887.....	355,083	347,271	1899.....	3,411,644	2,032,658	1911.....	32,559,044	17,355,272
1888.....	437,232	410,998	1900.....	4,468,225	2,740,362	1912.....	31,955,560	19,440,165
1889.....	383,318	358,785	1901.....	5,539,192	3,265,354	1913.....	31,845,803	19,040,924
1890.....	400,687	419,118	1902.....	4,291,317	2,238,351	1914.....	28,449,821	15,593,631
1891.....	414,523	409,549	1903.....	3,198,581	1,709,642	1915.....	26,625,960	13,228,842
1892.....	310,651	272,130	1904.....	3,577,526	2,047,095	1916.....	25,459,741	16,717,121
1893.....	—	330,128	1905.....	6,000,023	3,621,133	1917.....	22,221,274	18,091,895
1894.....	847,697	534,049	1906.....	8,473,379	5,659,455	1918.....	21,383,979	20,693,704
1895.....	1,578,275	1,030,299	1907.....	12,779,799	8,348,659	1919.....	16,020,657	17,802,474
1896.....	3,205,343	2,149,503	1908.....	22,106,233	11,686,239	1920.....	13,330,357	13,450,330
1897.....	5,558,456	3,323,395	1909.....	27,529,473	14,178,504	1921.....	13,543,198	8,485,255
1898.....	4,452,333	2,593,929	1910.....	32,869,264	17,580,504	1922.....	18,626,439	12,576,758
						1923.....	18,601,744	12,067,509

20.—Quantity and Value of Silver Produced in Canada, by Provinces, during the calendar years 1911-1923.

Years.	Ontario.		Quebec.		British Columbia.		Yukon Territory.	
	Oz.	\$	Oz.	\$	Oz.	\$	Oz.	\$
1911.....	30,540,754	16,279,443	18,435	9,827	1,887,147	1,005,924	112,708	60,078
1912.....	29,214,025	17,772,352	9,465	5,758	2,651,002	1,612,737	81,068	49,318
1913.....	28,411,261	16,987,377	34,573	20,672	3,312,343	1,980,483	87,626	52,393
1914.....	25,139,214	13,779,055	57,737	31,646	3,159,897	1,731,971	92,973	50,959
1915.....	22,748,609	11,302,419	63,450	31,524	3,565,852	1,771,658	248,049	123,241
1916.....	21,608,158	14,188,133	98,610	64,748	3,392,872	2,227,794	360,101	236,446
1917.....	19,301,835	15,714,975	136,194	110,885	2,655,994	2,162,430	119,605	97,379
1918.....	17,198,737	16,643,562	178,675	172,907	3,921,336	3,794,755	71,915	69,594
1919.....	12,117,878	13,465,628	140,926	156,600	3,713,537	4,126,556	27,556	30,621
1920.....	9,907,626	9,996,795	61,003	61,552	3,327,028	3,356,971	19,190	19,363
1921.....	9,761,607	6,116,037	38,084	23,861	3,350,357	2,099,133	393,092	246,288
1922.....	10,811,903	7,300,305	—	—	7,150,937	4,828,384	663,493	447,997
1923.....	10,540,943	6,838,226	33,006	21,412	6,118,327	3,965,899	1,914,438	1,241,953

Years.	Nova Scotia.		New Brunswick.		Manitoba.	
	Oz.	\$	Oz.	\$	Oz.	\$
1917.....	—	—	445	363	7,201	5,863
1918.....	—	—	—	—	13,316	12,886
1919.....	—	—	—	—	20,760	23,069
1920.....	—	—	—	—	15,510	15,649
1921.....	25	16	—	—	33	20
1922.....	86	58	—	—	20	14
1923.....	25	16	—	—	5	3

NOTE.—For the years 1887 to 1910, see Canada Year Book, 1916-1917, p. 271.

3.—Copper.

The copper-mining industry has developed at a very rapid rate. A production of 3,505,000 lb. in 1886 had doubled six years later. In 1913, the output had increased over twenty-one fold, amounting to over 76,977,000 lb. The extraordinary demand for war requirements resulted in a maximum production from 1916 to 1918, when the average output was 115,048,931 lb. The production during the calendar year 1923 was 86,881,537 lb., of which 44,729,386 lb. were produced during the first half of the year. The comparative figure for the first half of 1924 was 52,103,161 lb., indicating a satisfactory recovery after the post-war depression.

Ontario.—The Sudbury deposits were first noted in 1856, but did not attract attention until 1883-4, during the period of the construction of the Canadian Pacific railway, when a railway cutting was made through the small hill on which the Murray mine was afterwards located. During the first few years the deposits were exploited for their copper contents alone; not until 1886 was the presence of nickel determined and the true value of the ores made known. The nickel-copper ores of the Sudbury area are the source of nearly all the copper produced in Ontario. The ores contain from 1 to 2.5 p.c. of copper, the recovery averaging a little over 1.5 p.c. The International Nickel Company, Ltd., has a smelting plant at Copper Cliff and a refinery at Port Colborne. The mining properties include the Creighton, the Crean Hill and the No. 2 mine at Copper Cliff. The smelter of the Mond Nickel Company is at Coniston, and the copper-nickel matte is exported to their refinery at Swansea, Wales.

British Columbia.—The production of copper in the province during 1923 amounted to 55,224,737 lb., the Skeena, Trail creek and Vancouver (mainland) mining divisions being the chief producers. The Hidden Creek or Anyox mine, south of the Portland canal, owned by the Granby Company, is probably the largest copper mine in the province. The claims are situated on a hill some 920 feet in height. There are two principal ore bodies, one from 100 to 250 feet wide and traced for some 1,500 feet, the other being about 400 feet wide and about 700 feet long. The Anyox plant, situated on Observatory inlet, and blown in during March, 1914, is a large pyritic smelter. The Le Roi-Centre Star group, forming part of the property of the Consolidated Mining and Smelting Co., is situated on the southern slope of Red mountain at Rossland. In the Vancouver mining division the chief producer is the Britannia mine, situated on the east side of Howe sound on the Pacific coast. The ores occur in a mineralized zone which is at least 4 miles long and which, towards its centre, has a variable width of from 300 to 600 feet.

Manitoba.—Much development has been carried on in the Flin Flon district of Manitoba in the last eight years. The Mining Corporation of Canada, after securing a controlling interest in the Flin Flon group, has carried on extensive development work by sinking and cross-cutting, verifying the results of previous diamond-drilling and proving large tonnages of ore to be in place. A branch extension of the Hudson Bay railway and the construction of smelter works are required for the economic treatment of the copper ores of the district.

World's Production of Copper.—The world's production of copper was estimated at 994,336 short tons in 1922 as compared with 596,090 tons in the preceding year. Preliminary estimates indicate that a considerable recovery was effected in 1923, the production being given as 1,433,102 tons. Canada had an output of 43,441 tons in 1923, producing about 3 p.c. of the world's estimated total.

21.—Quantity and Value of Copper Produced in Canada, by Provinces, calendar years 1911-1923.

Years.	Ontario.		Quebec.		British Columbia.		Total.	
	Lb.	\$	Lb.	\$	Lb.	\$	Lb.	\$
1911.....	17,932,263	2,219,297	2,436,190	301,503	35,279,558	4,366,198	55,648,011	6,886,998
1912.....	22,250,601	3,635,971	3,282,210	536,346	50,526,656	8,256,561	77,832,127	12,718,548
1913.....	25,885,929	3,952,522	3,455,887	527,679	45,791,579	6,991,916	76,976,925	11,753,606
1914.....	28,948,211	3,937,536	4,201,497	571,488	41,219,202	5,606,636	75,735,960	10,301,606
1915.....	39,361,464	6,799,693	4,197,482	725,115	56,692,988	9,793,714	100,785,150	17,410,635
1916.....	44,997,035	12,240,094	5,703,347	1,551,424	63,642,550	17,312,046	117,150,028	31,867,150
1917.....	42,867,774	11,651,461	5,015,560	1,363,229	57,730,959	15,691,275	109,227,332	29,687,989
1918.....	47,074,475	11,593,502	5,869,649	1,445,577	62,865,681	15,482,560	118,769,434	29,250,536
1919.....	24,346,623	4,550,627	2,691,695	503,105	44,502,079	8,317,884	75,053,581	14,028,265
1920.....	32,059,993	5,596,392	880,638	153,724	45,319,771	7,911,019	81,600,691	14,244,217
1921.....	12,821,385	1,602,930	352,308	44,045	34,447,127	4,306,580	47,620,820	5,953,555
1922.....	10,943,636	1,464,477	-	-	31,936,182	4,273,700	42,879,818	5,738,177
1923.....	31,656,800	4,565,227	-	-	55,224,737	7,963,959	86,881,537	12,529,136

PRODUCTION OF COPPER IN MANITOBA AND YUKON TERRITORY (INCLUDED IN TOTAL).

Years.	Manitoba, (included in total).		Yukon Territory, (included in total).	
	Lb.	\$	Lb.	\$
1912.....	-	-	1,772,660	289,670
1913.....	-	-	1,843,530	281,489
1914.....	-	-	1,267,050	185,946
1915.....	-	-	533,216	92,113
1916.....	-	-	2,807,096	763,586
1917.....	1,116,000	303,329	2,480,079	668,650
1918.....	2,339,751	576,234	619,878	152,663
1919.....	3,348,000	625,775	165,184	30,874
1920.....	3,062,577	534,604	277,712	48,475
1921.....	-	-	-	-
1922.....	-	-	-	-
1923.....	-	-	-	-

NOTE.—For the years 1886 to 1910, see Canada Year Book, 1916-17, p. 272.

¹Includes 36,960 lb., valued at \$10,045, from New Brunswick and Alberta, not given separately.

22.—Copper Production of Seven Countries and of the World, 1913-1923.¹

(In short tons of 2,000 pounds.)

Years.	United States.	Mexico.	Canada.	Chile.	Peru.	Spain and Portugal.	Japan.	World's production.
1913.....	614,255	58,185	38,460	46,574	30,609	39,683	73,283	1,072,674
1914.....	579,133	40,043	37,498	49,221	29,853	29,652	77,650	1,011,939
1915.....	712,126	34,128	52,016	57,680	38,269	40,895	83,108	1,188,172
1916.....	971,123	60,751	52,880	78,559	47,472	39,021	110,900	1,533,294
1917.....	961,016	52,348	55,790	112,985	49,784	45,084	119,058	1,579,675
1918.....	968,687	83,233	58,068	117,851	48,944	50,596	99,533	1,569,523
1919.....	604,642	66,661	39,789	87,721	43,243	38,581	86,468	1,069,437
1920.....	635,248	49,866	39,121	104,173	36,356	25,353	74,727	1,078,235
1921.....	238,420	13,576	23,810	61,421	36,689	36,596	59,626	596,090
1922.....	511,970	29,842	21,660	141,433	40,133	40,234	60,365	994,336
1923.....	754,563	60,538	43,441	224,048	48,342	57,115	70,316	1,433,102

¹From the Year Book of the American Bureau of Metal Statistics, New York.

4.—Lead.

Lead is obtained in Canada largely from the deposits of British Columbia. From 88,665 lb. in 1891, the production advanced to over 39,000,000 lb. in 1897, an average increase of about 6,500,000 lb. per year. Owing to the low price of silver in 1898 and labour troubles in the Slocan in 1899, the output fell off to 21,900,000 lb. in 1899, but rose to 63,200,000 in 1900. This increase was due to the development of two or three mines in the Fort Steele mining division, although all the lead-producing districts except Ainsworth showed a material increase in production. The output fell to 18,100,000 lb. in 1903, owing to the condition of the market affecting the production of the low grade silver-lead ores of the East Kootenay district. An Act was passed in October, 1903, providing for the payment of bounties on lead contained in lead-bearing ores mined in Canada, and as a direct result of the bounty, the output increased to 56,900,000 lb. in 1905, but fell off gradually to 23,800,000 lb. in 1911. A steady improvement has since been experienced; a record total of 111,200,000 lb. was reached in 1923, while 79,000,000 lb. were produced in the first half of 1924.

British Columbia.—In the East Kootenay district, the Consolidated Mining and Smelting Company operates many important mines, the principal of which is the Sullivan lead-zinc mine near Kimberley. The ore averages, on large shipments, about 16.5 p.c. lead, 14 p.c. zinc and 7 ounces of silver to the ton. In the West Kootenay district the ores are chiefly argentiferous galena and zinc-blende, occurring as veins in granites and slates. The ores range from 7 p.c. to 75 p.c. of lead with considerable values of silver.

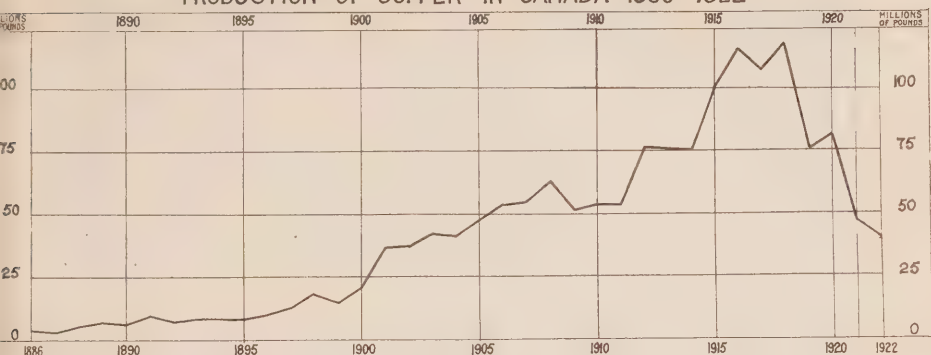
Ontario.—Lead-mining in Ontario is intimately associated with the successful operations of the Galetta mine and smelter. The deposit on the property occupies a well marked fault fissure cutting across the strike of the pre-Cambrian crystalline limestone, the ore mineral being galena, carrying very little silver, associated with minor quantities of zinc-blende and pyrites.

23.—Quantity and Value of Lead Produced from Canadian Ores, calendar years 1887-1923.

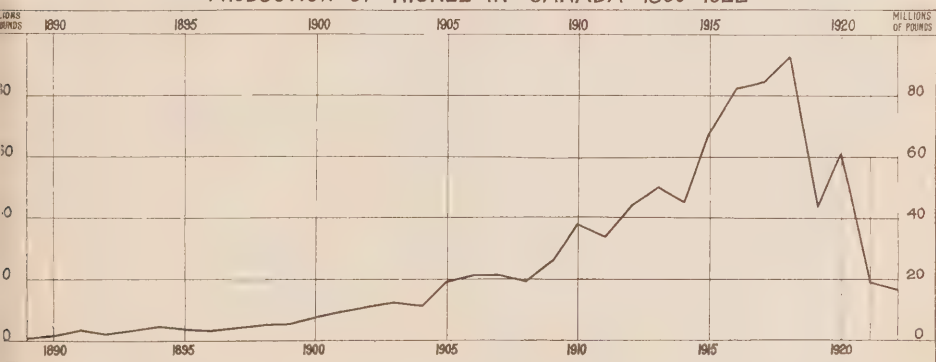
Years.	Quantity.	Value.	Cents per pound ¹ .	Years.	Quantity.	Value.	Cents per pound ¹ .
	lb.	\$			lb.	\$	
1887.....	204,800	9,216	5.400	1905.....	56,864,915	2,676,632	4.707
1888.....	674,500	29,812	4.420	1906.....	54,608,217	3,089,187	5.657
1889.....	165,100	6,488	3.930	1907.....	47,738,703	2,542,086	5.325
1890.....	105,000	4,704	4.480	1908.....	43,195,733	1,814,221	4.200
1891.....	88,665	3,857	4.350	1909.....	45,857,424	1,692,139	3.690
1892.....	808,420	33,064	4.090	1910.....	32,987,508	1,216,249	3.687
1893.....	2,135,023	79,636	3.730	1911.....	23,784,969	827,717	3.480
1894.....	5,703,222	187,636	3.290	1912.....	35,763,476	1,597,554	4.467
1895.....	16,461,794	531,716	3.230	1913.....	37,662,703	1,754,705	4.659
1896.....	24,199,977	721,159	2.980	1914.....	36,337,765	1,627,568	4.479
1897.....	39,018,219	1,396,853	3.580	1915.....	46,316,450	2,593,721	5.600
1898.....	31,915,319	1,206,399	3.780	1916.....	41,497,615	3,532,692	8.513
1899.....	21,862,436	977,250	4.470	1917.....	32,576,281	3,628,020	11.137
1900.....	63,169,821	2,760,521	4.370	1918.....	51,398,002	4,754,315	9.250
1901.....	51,900,958	2,249,387	4.334	1919.....	43,827,669	3,053,037	6.966
1902.....	22,956,381	934,095	4.069	1920.....	35,953,717	3,214,262	8.940
1903.....	18,139,283	768,562	4.237	1921.....	66,679,592	3,828,742	5.742
1904.....	37,531,244	1,617,221	4.309	1922.....	93,307,171	5,817,702	6.219
				1923.....	111,234,466	7,985,522	7.179

¹In 1909 and 1910, average prices at Toronto as quoted by *Hardware and Metal*; in previous years, average prices at New York, as quoted by *Engineering and Mining Journal*; from 1911 to date, average price in Montreal. Quotations furnished from 1911 to 1919, by Messrs. Thos. Robertson & Co., Montreal, Que.; 1920 to 1923, by Consolidated Mining and Smelting Co., Montreal, Que.

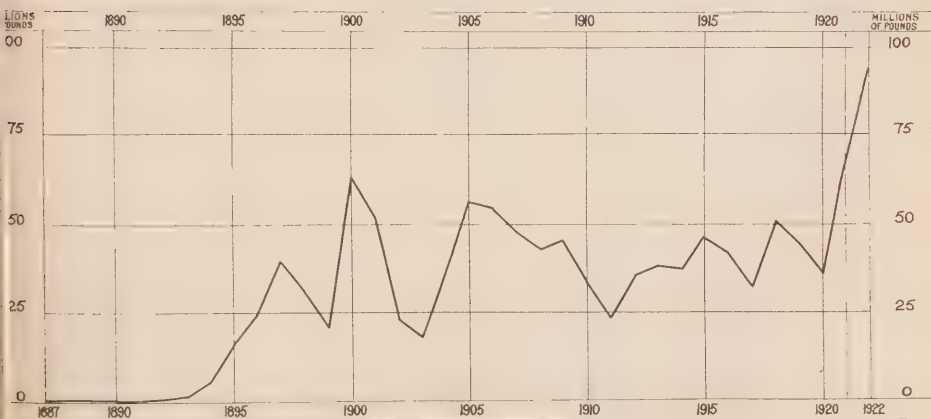
PRODUCTION OF COPPER IN CANADA 1886-1922



PRODUCTION OF NICKEL IN CANADA 1889-1922



PRODUCTION OF LEAD FROM CANADIAN ORES 1887-1922.



World's Production.—The world's production of lead in 1923 was about 1,297,247 short tons. The principal producers were the United States with 40.9 p.c., Mexico 17.9 p.c., Australia 10.5 p.c. and Spain with 9.3 p.c. Canada produced about 4.3 p.c. of the total.

5.—Nickel.

With the exception of the nickel in the ores shipped from the Cobalt district and from the Alexo mine in the Porcupine area, the Canadian production of nickel is derived entirely from the well known nickel-copper deposits of the Sudbury district, Ontario. From 830,477 lb. in 1889, the production increased continually in trend to 92,500,000 lb. in 1918, constituting a record. In 1922 about 17,600,000 lb. were produced, as compared with 62,500,000 lb. in 1923, and 35,200,000 lb. during the first six months of 1924.

Sudbury.—The nickel-bearing rocks of the Sudbury district, with a width of about two and one-half miles, form a wide ellipse thirty-six miles long and thirteen miles broad. The ores consist mainly of a mixture of pyrrhotite and chalcopyrite intimately associated with more or less country rock. The nickel occurs in the pyrrhotite as pentlandite and varies somewhat in amount. The ore deposits are of three main types—marginal deposits, offset deposits and vein-like deposits—of which the marginal have proved the most productive. The Creighton mine, which may be called the greatest nickel mine in the world, is an example of a marginal deposit. The Copper Cliff mine is an example of an offset deposit, while the Vermilion mine is probably the best example of a vein-like deposit, probably formed by hot, circulating waters. The ore mined in the district varies considerably in richness, the average metal content being about 2 to 3 p.c. of nickel, $1\frac{1}{2}$ to 2 p.c. of copper and 45 p.c. of iron. Cobalt, gold, silver, platinum and palladium are nearly always present in very small quantities. The matte produced by the International Nickel Company averages about 54 to 56 p.c. of nickel and about 24 p.c. of copper, while that of the Mond Nickel Company contains about 41 p.c. each of nickel and of copper.

World's Production.—The world's production of nickel, exclusive of electrolytic nickel, in 1922 was about 11,555 long tons, of which output 68 p.c. was Canadian in origin, while about 30 p.c. was derived from the oxidized ores of New Caledonia. The proved deposits of nickel ore in Canada are estimated to contain 2,000,000 tons of nickel, and there are at present large reserves undeveloped.

24. Quantity and Value of Nickel Produced in Canada during the calendar years 1889-1923.

Years.	Quantity.	Value.	Years.	Quantity.	Value.	Years.	Quantity.	Value.
	lb.	\$		lb.	\$		lb.	\$
1889.....	830,477	498,286	1901	9,189,047	4,594,523	1913	49,676,772	14,903,032
1890.....	1,435,742	933,232	1902	10,693,410	5,025,903	1914	45,517,937	13,655,381
1891.....	4,035,347	2,421,208	1903	12,505,510	5,002,204	1915	68,308,657	20,492,597
1892.....	2,413,717	1,399,956	1904	10,547,883	4,219,153	1916	82,958,564	29,035,498
1893.....	3,982,982	2,071,151	1905	18,876,315	7,550,526	1917	82,330,280	33,732,112
1894.....	4,907,430	1,870,958	1906	21,490,955	8,948,834	1918	92,507,293	37,002,917
1895.....	3,888,525	1,360,984	1907	21,189,793	9,535,407	1919	44,544,883	17,817,953
1896.....	3,397,113	1,188,990	1908	19,143,111	8,231,538	1920	61,335,706	24,534,282
1897.....	3,997,647	1,399,176	1909	26,282,991	9,461,877	1921	19,293,060	6,752,571
1898.....	5,517,690	1,820,838	1910	37,271,033	11,181,310	1922	17,597,123	6,158,993
1899.....	5,744,000	2,067,840	1911	34,098,744	10,229,623	1923	62,453,843	18,332,077
1900.....	7,080,227	3,327,707	1912	44,841,542	13,452,463			

6.—Cobalt.

The major portion of the world's supply of cobalt has for almost two decades been derived from the silver-cobalt-nickel arsenides of the Cobalt district, the silver refineries at Thorold and Deloro in Ontario having practically controlled the world's production in recent years.

The ore bodies at Cobalt, discovered in 1902, carry silver, cobalt, nickel and arsenic. About 82 p.c. of the productive veins occur in the Cobalt series (conglomerate, greywacke, etc.), about 11 p.c. in the Keewatin, the basic igneous rocks underlying the Cobalt series, and the remaining 7 p.c. in the Nipi-sing diabase.

The Coniagas and Delora smelters treat ores and residues and dispose of cobalt oxide, metallic oxide and unseparated oxides of nickel and cobalt. The cobalt residues from the cyanide process are for the most part treated in Canada, though some are shipped abroad for treatment. The smelter output of cobalt, computed as the metallic contents of cobalt oxide, nickel oxide and mixed oxides, together with the cobalt in cobalt ores exported from the mines, and including cobalt in speiss residues exported, amounted in the first half of 1924 to 481,411 lb. as against 538,018 lb. in the same period of 1923. For total 1923 production and values see Table 2 of this section.

7.—Zinc.

The zinc-mining industry of Canada has recently made rapid strides, largely on account of the application of the electrolytic method to treating the lead-zinc ores of British Columbia. The metallic recoveries from Canadian ores were about 60,400,000 lb. in 1923, as compared with 5,500,000 lb. in 1913. From an insignificant position in 1913, the country advanced to the eighth rank among the world's producers in 1923, with an output of about 2.8 p.c. of the world total.

British Columbia.—The principal zinc-mining regions are situated in the Kootenay district of British Columbia, where there are large deposits of silver-lead-zinc ore. The chief producing mine is the Sullivan in the Fort Steele division, where the ore worked is a replacement deposit of considerable size. Other active mines are located at Ainsworth and Slocan in the West Kootenay district and at Omineca in the Cariboo district.

Before the war the industry was greatly retarded by unsatisfactory marketing conditions. The majority of the mines were essentially producers of silver and lead, and zinc-blende occurred as an accessory ore. Until local smelting proved successful, practically all the British Columbia ores were treated at seven or more smelters in the United States, but the cost of freight to these, although covered by a combined "freight and treatment rate", was necessarily an important charge against the ore. The high tariff on zinc ores exported to the United States was also a consideration. The smelter at Trail, originally intended, on its erection in 1895, for the treatment of gold- and silver-bearing copper ores, was made ready for the treatment of silver-lead ores at a later date. The electrolytic zinc plant was added for regular commercial operations early in 1916; its capacity is rated at 100 tons per day.

The higher prices paid for silver during the period of the war led the producers of silver-bearing ores to expedite shipments, disregarding the increased quantity of zinc middling. No zinc is recovered in lead blast-furnace smelting, and it is detrimental to operation, causing losses, slow running and high cost. The treatment charges of the Trail smelter were altered in January, 1918, with the object of bringing about an increase of the ratio of slag-forming elements to zinc in all ores requiring it, through the elimination of some of the zinc. No lead ore containing more than 20 p.c. of zinc was accepted, and for lead ores containing 4 p.c. of zinc or over, the

shipper was penalized according to the amount of the zinc present. A new schedule was announced in April, 1922, providing for payment for zinc in ores on a sliding scale running from 30 to 35 p.c. zinc.

25.—Production of Zinc in Canada, calendar years 1911-1923.

Years.	Production of Zinc.			Years.	Production of Zinc.		
	Quantity ¹ .	Value.	Average price per pound.		Quantity ¹ .	Value.	Average price per pound.
	lb.	\$	cts.		lb.	\$	cts.
1911.....	1,877,479	108,105	5.758	1918.....	35,083,175	2,862,436	8.159
1912.....	4,283,760	297,421	6.943	1919.....	32,194,707	2,362,448	7.338
1913.....	5,640,195	318,558	5.648	1920.....	39,863,912	3,057,961	7.671
1914.....	7,246,063	377,737	5.213	1921.....	53,089,356	2,471,310	4.655
1915.....	9,771,651	1,292,789	13.230	1922.....	56,290,000	3,217,536	5.716
1916.....	23,364,760	2,991,623	12.804	1923.....	60,416,240	3,991,701	6.607
1917.....	29,668,764	2,640,817	8.901				

¹Estimated smelter recoveries, including, for years 1916 to 1923, the actual zinc recovered at Trail, B.C.

8.—Iron.¹

The fact that iron ore is widely distributed in Canada has long been known, and extensive deposits have been discovered from time to time. The development of the iron-mining industry, however, has been retarded by the abundant supply of the higher-grade ores of Wabana, Newfoundland, and of the Mesabi range of the state of Minnesota.

Nova Scotia.—The Wabana section of Newfoundland, containing the largest single deposit of iron ore in the world, is operated by the British Empire Steel Corporation of Nova Scotia. The probable reserves have been estimated at 3,635,000,000 tons, and analysis has shown that the Wabana ore consists of an exceptionally high-grade hematite. Ore to the amount of 887,360 tons was shipped in 1922 to the blast-furnaces of the company at Sydney, where the proximity of the adjacent coalfield favours the economical production of pig iron and steel. Development work carried on also at Torbrook in Annapolis county indicates that the deposits there are very extensive. The ore is red hematite, containing a good percentage of iron rather high in phosphorus. An important iron ore field in Antigonish county is the Arisaig district.

New Brunswick.—The most important deposits so far discovered are those in the Austin Brook district of Bathurst county, where mining experts state that great masses of iron ore have been located.

Quebec.—It is estimated that there are many millions of tons of iron magnetite sands, containing a high percentage of iron, along the north shore of the St. Lawrence at Moisie, Mingan, Natashkwan and other places in the county of Saguenay. The sands contain a high percentage of titanium, rendering the briquetted iron sands unfavourable for blast-furnace treatment. There are a number of deposits of bog iron ore in the St. Lawrence valley, remarkably free from sulphur and phosphorus. The bog iron ores were successfully used in charcoal blast-furnaces at Radnor Forges and Drummondville for many years. Iron ore deposits also exist along the Gatineau

¹A sketch of the iron and steel industry of Canada was given of pages 452 to 456 of the 1922-1923 Year Book.

river, in Hull township, within a few miles of the city of Ottawa. The Bristol mine, in Pontiac county, has been proved to contain large deposits of magnetite, but the ore is high in sulphur and would require roasting.

Ontario.—The iron and steel industry in Ontario is chiefly dependent on imported ores, but several companies have demonstrated what can be done by the beneficiation of low-grade Canadian ores. The Moose Mountain iron range is situated about 35 miles north of Sudbury and over 100,000,000 tons of magnetite have been proved by the owners. The Atikokan district, west of Sabawa lake, contains approximately 15,000,000 tons of magnetite, while the Atikokan mine, to the east of the lake, has shown 10,000,000 tons. The deposits of non-Bessemer ore in the Michipicoten district are extensive, and millions of tons of red hematite were taken from the Helen mine. The Magpie mine produces siderite, which is roasted before being shipped to the blast-furnaces at Sault Ste. Marie owned by the Algoma Steel Co. The "Iron Ore Committee" appointed by the Ontario Government investigated the situation and recently presented their report, recommending that the government offer a bounty of 1 cent per unit of iron on each long ton of merchantable iron ore marketed from Ontario mines, the "unit" being 1 per cent of iron in each ton of iron ore. Thus, if the ore assayed 40 p.c. iron, the bounty would be 40 cents per ton. This bounty is being granted for a period of 10 years from the date at which it becomes effective.

British Columbia.—Owing to the lack of a local iron-smelting industry the production of iron ore in British Columbia has not reached important dimensions. On the northeast coast of Texada island there are extensive deposits estimated to contain 5,000,000 tons of magnetite. The Glen iron mine on the south side of Kamloops lake, estimated to contain reserves of 8,000,000 tons, has been worked intermittently for several years, the ore being shipped to Tacoma and to the Revelstoke Smelting Works.

26.—Iron Ore Shipments and Production of Pig Iron, calendar years 1909-1923.

Years.	Ore shipments from Canadian mines.	Production of Pig Iron.							
		Nova Scotia.		Quebec.		Ontario.		Total.	
		Short tons.	\$	Short tons.	\$	Short tons.	\$	Short tons.	\$
1909....	268,043	354,380	3,453,800	4,770	125,623	407,012	6,002,441	757,162	9,581,864
1910....	259,418	350,287	4,203,444	3,237	85,255	447,273	6,956,923	800,797	11,245,622
1911....	210,344	390,242	4,682,904	658	17,282	526,635	7,606,939	917,535	12,307,125
1912....	215,883	424,994	6,374,910	—	—	559,593	8,176,089	1,014,587	14,550,999
1913....	307,634	480,068	7,201,020	—	—	648,899	9,338,992	1,128,967	16,540,012
1914....	244,854	227,052	2,951,676	—	—	556,112	7,051,180	783,164	10,002,856
1915....	398,112	420,275	5,463,575	—	—	493,500	5,910,624	913,775	11,374,199
1916....	275,176	470,055	7,050,825	—	—	699,202	9,700,073	1,169,257	16,750,898
1917....	215,302	472,147	10,387,234	—	—	684,642	13,902,867	1,170,480 ¹	25,025,960 ¹
1918....	211,608	415,870	10,451,400	7,449	419,521	747,650	21,324,857	1,195,551 ¹	33,495,171 ¹
1919....	197,170	285,087	7,141,641	7,701	331,797	624,993	17,104,151	917,781	24,577,589
1920....	129,072	332,493	7,687,614	8,835	379,348	749,068	22,252,062	1,090,396	30,319,024
1921....	59,509	169,504	4,407,104	683	17,758	495,489	12,882,714	665,676	17,307,576
1922....	17,971	135,261	3,139,994	—	—	293,662	6,493,513	428,923	9,633,507
1923....	30,752	310,972	5,360,099	—	—	674,428	15,995,496	985,400	21,355,595

¹Included in the totals is additional pig iron made in electric furnaces from scrap metal other than in the province of Quebec. The amounts and values were in 1917, 13,691 short tons, with a value of \$735,859, and in 1918, 24,582 tons, with a value of \$1,299,393.

4.—Non-Metallic Minerals.

1.—Coal.

The fuel situation of Canada is somewhat anomalous, as in spite of the enormous resources of coal in the country, about 50 p.c. of the consumption is imported from the United States. The Canadian coal areas are situated in the eastern and western provinces, while Ontario and Quebec are more easily and economically supplied with coal from the nearer coal fields of Pennsylvania and Ohio.¹ The anomaly of this situation is heightened if we consider that Canada's present coal consumption is about 35,000,000 tons annually, as against reserves of 1,234,289,000,000 metric tons, sufficient for an unthinkable long period at the present rate of consumption.

The coal production in 1923 amounted to 16,990,571 tons, valued at \$72,058,986, or an average of \$4.33 per ton. This represented an increase of 1,833,140 tons or 7.8 p.c. in quantity as compared with the previous year. The production was obtained by mines in which were employed on an average 30,300 men at a wage cost of approximately \$42,321,990. Referring to production during 1923, Alberta held the first place among the coal-producing provinces with an output of 6,854,397 tons; Nova Scotia followed closely with 6,597,838 tons; the output of coal from the mines of British Columbia and Yukon amounted to 2,823,619 tons, while Saskatchewan mined 438,100 tons and New Brunswick 276,617 tons. The quantity of coal mined annually in five provinces and the Yukon Territory, from 1909 to 1923, is shown comparatively in Table 27.

27.—Production of Coal in Canada, by Provinces, calendar years 1909-1923.

Years.	Nova Scotia.	New Brunswick.	Saskatchewan.	Alberta.	British Columbia	Yukon Territory.	Total production.	Value.
	Short tons.	Short tons.	Short tons.	Short tons.	Short tons.	Short tons.	Short tons.	\$
1909.....	5,652,089	49,029	192,125	1,994,741	2,606,127	7,364	10,501,475	24,781,236
1910.....	6,431,142	55,455	181,156	2,894,469	3,330,745	16,185	12,909,152	30,909,779
1911.....	7,004,420	55,781	206,779	1,511,036	2,542,532	2,840	11,323,388	26,467,646
1912.....	7,783,888	44,780	225,342	3,240,577	3,208,997	9,245	14,512,829	36,019,044
1913.....	7,980,073	70,311	212,897	4,014,755	2,714,420	19,722	15,012,178	37,334,940
1914.....	7,370,924	88,049	232,299	3,683,015	2,239,799	13,443	13,637,529	33,471,801
1915.....	7,463,370	127,391	240,107	3,360,818	2,065,613	9,724	13,267,023	32,111,182
1916.....	6,912,140	143,540	281,300	4,559,054	2,584,061	3,300	14,483,395	38,817,481
1917.....	6,327,091	189,095	355,445	4,736,368	2,433,888	4,872	14,046,759	43,199,831
1918.....	5,818,562	268,212	346,847	5,972,816	2,568,589	2,900	14,977,926	55,192,896
1919.....	5,720,373	179,108	380,169	4,964,535	2,435,933	1,100	13,681,218	54,413,349
1920.....	6,395,545	161,164	349,860	6,859,346	2,856,920	763	16,623,598	77,326,853
1921.....	5,734,928	188,192	335,632	5,909,217	2,890,291	233	15,057,262	72,451,656
1922.....	5,569,072	287,513	382,437	5,990,911	2,927,033	465	15,157,431	65,518,497
1923.....	6,597,838	276,617	438,100	6,854,397	2,823,306	313	16,990,571	72,058,986

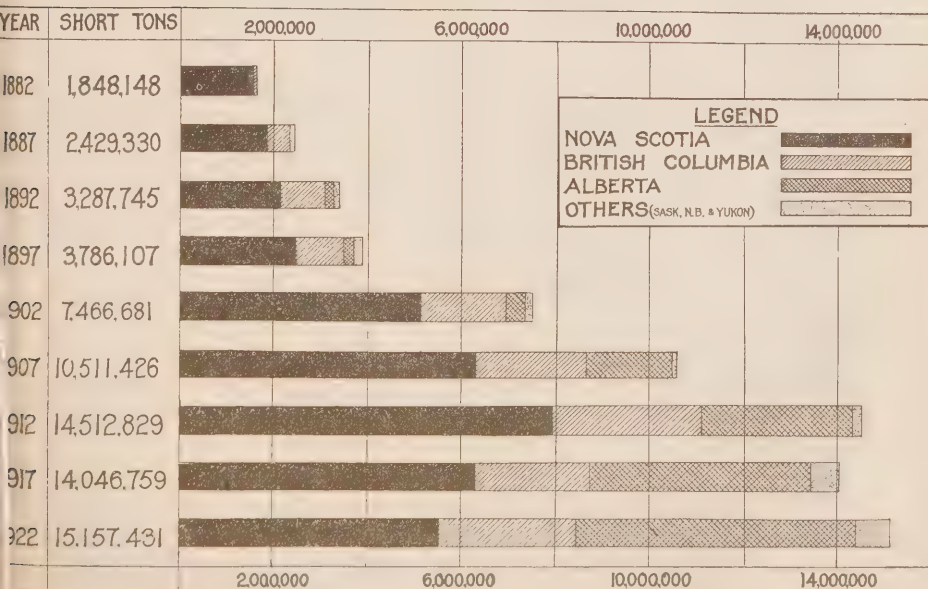
The total coal imports in the calendar year 1923 amounted to 22,687,320 tons, as compared with 14,257,424 tons in the previous year. The exports of coal of domestic production in 1923 amounted to 1,654,406 tons, valued at \$10,661,399, or an average of \$6.41 per ton, as compared with 1,818,582 tons, valued at \$11,159,060, in 1922. The imports of anthracite and bituminous coal for fiscal years from 1901 to 1924 are given in Table 30, and the exports from 1903 to 1924 in Table 31.

¹ See map showing sources of Canada's coal supply, p. 386 of 1922-23 Year Book.

28.—Annual Consumption of Coal in Canada, calendar years 1901-1923.

Years.	Canadian.		Imported.		Total tons.	Tons per capita.
	Short tons.	p.c.	Short tons.	p.c.		
1901.....	4,912,664	50.5	4,810,213	49.5	9,722,877	1.810
1902.....	5,376,413	51.0	5,165,938	49.0	10,542,351	1.927
1903.....	6,005,735	52.2	5,491,870	47.8	11,507,605	2.055
1904.....	6,697,183	49.2	6,909,651	50.8	13,606,834	2.346
1905.....	7,032,661	48.9	7,343,880	51.1	14,316,541	2.362
1906.....	7,927,560	51.7	7,398,906	48.3	15,326,466	2.425
1907.....	8,617,352	45.0	10,549,503	55.0	19,166,855	2.947
1908.....	9,166,478	47.3	10,195,424	52.7	19,351,902	2.820
1909.....	8,913,376	47.9	9,711,826	52.1	18,625,202	2.682
1910.....	10,532,103	50.2	10,438,123	49.8	20,970,226	2.960
1911.....	9,822,749	40.5	14,424,949	59.5	24,247,698	3.365
1912.....	12,385,696	46.0	14,549,104	54.0	26,934,800	3.657
1913.....	13,450,158	42.6	18,132,387	57.4	31,582,545	4.196
1914.....	12,214,403	45.5	14,637,920	54.5	26,852,323	3.490
1915.....	11,500,480	48.1	12,406,212	51.9	23,906,692	3.041
1916.....	12,348,036	41.3	17,517,820	58.7	29,865,856	3.717
1917.....	12,313,603	37.2	20,810,132	62.8	33,123,735	4.049
1918.....	13,160,731	37.8	21,611,101	62.2	34,771,832	4.175
1919.....	11,849,046	41.1	16,982,773	58.9	28,831,819	3.401
1920.....	14,388,541	40.9	20,815,596	59.1	35,204,137	4.079
1921.....	13,070,217	41.9	18,103,620	58.1	31,173,837	3.547
1922.....	13,338,849	48.3	14,257,424	56.7	27,596,273	3.087
1923.....	15,336,165	40.3	22,687,320	59.7	38,023,485	4.186

NOTE.—For years 1886 to 1900, see 1921 Year Book, p. 354.

OUTPUT OF COAL BY PROVINCES
1882 to 1922

29.—Summary Statistics for 1923—Output, Exports, Interprovincial Shipments, Imports and Coal made Available for Consumption in Canada, by Provinces.

(Short tons.)

Provinces.	Canadian Coal.				Imported from U.S.A.	Imported from Great Britain.	Coal available for consumption.
	Output.	Received from other provinces.	Shipped to other provinces.	Exported.			
Nova Scotia—							
Anthracite.....	—	—	—	—	35,169	18,570	53,739
Bituminous.....	6,597,838	—	2,179,061	679,771	44,426	7,871	3,791,303
Total....	6,597,838	—	2,197,061	679,771	79,595	26,441	3,845,042
New Brunswick—							
Anthracite.....	—	—	—	—	54,556	35,787	90,343
Bituminous.....	276,617	563,598	32,113	115,364	78,842	23,440	795,020
Total....	276,617	563,598	32,113	115,364	133,398	59,227	885,363
Prince Edward Island—							
Anthracite.....	—	—	—	—	4,303	—	4,303
Bituminous.....	—	82,417	—	—	1,263	—	83,680
Total....	—	82,417	—	—	5,566	—	87,983
Quebec—							
Anthracite.....	—	—	—	—	1,611,351	205,058	1,816,409
Bituminous.....	—	1,540,284	—	3	2,922,991	237,498	4,700,770
Lignite.....	—	—	—	—	—	—	—
Total....	—	1,540,284	—	3	4,534,342	442,556	6,517,179
Central Ontario—							
Anthracite.....	—	—	—	—	3,059,964	2,244	3,062,208
Bituminous.....	—	24,875	—	877	11,717,298	—	11,741,296
Lignite.....	—	51,331 ¹	—	—	—	—	51,331
Sub-bituminous	—	1,560 ¹	—	—	—	—	1,560
Total....	—	77,766	—	877	14,777,262	2,244	14,856,395
Manitoba and Head of Lakes—							
Anthracite.....	—	—	—	—	138,414	—	138,414
Bituminous.....	—	22,269	—	8,213	2,462,838	—	2,476,894
Lignite.....	—	701,615	—	—	—	—	701,615
Sub-bituminous	—	61,064	—	—	—	—	61,064
Total....	—	784,948	—	8,213	2,601,252	—	3,377,987
Saskatchewan—							
Anthracite.....	—	—	—	—	2,291	—	2,291
Bituminous.....	—	101,820	—	11,510	1,607	—	91,917
Lignite.....	438,100	1,120,447	219,937	—	—	—	1,338,610
Sub-bituminous	—	29,275	—	—	—	—	29,275
Total....	438,100	1,251,542	219,937	11,510	3,898	—	1,462,093
Alberta—							
Anthracite.....	107	—	—	—	—	—	107
Bituminous.....	3,243,803	18,054	103,290	605	1,110	—	3,159,072
Lignite.....	3,143,995	—	1,724,456	—	—	—	1,419,539
Sub-bituminous	466,492	—	106,340	—	—	—	360,152
Total....	6,854,397	18,054	1,934,086	605	1,110	—	4,938,870
British Columbia and Yukon—							
Anthracite.....	—	—	—	—	174	—	174
Bituminous.....	2,823,619	23,298	62,151	838,063	17,923	1	1,964,627
Lignite.....	—	71,000	—	—	2,331	—	73,331
Sub-bituminous	—	14,441	—	—	—	—	14,441
Total....	2,823,619	108,739	62,151	838,063	20,428	1	2,052,573

29.—Summary Statistics for 1923—Output, Exports, Interprovincial Shipments, Imports and Coal made Available for Consumption in Canada, by Provinces—concluded.

(Short tons.)

Provinces.	Canadian Coal.				Imported from U.S.A.	Imported from Great Britain.	Coal available for consumption.
	Output.	Received from other provinces.	Shipped to other provinces.	Exported.			
Canada—							
Anthracite.....	107	—	—	—	4,906,222	261,659	5,167,988
Bituminous.....	12,941,877	2,376,615	2,376,615	1,654,406	17,248,298	268,810	28,804,579
Lignite.....	3,582,095	1,944,393	1,944,393	—	2,331	—	3,584,426
Sub-bituminous	466,492	106,340	106,340	—	—	—	466,492
Total....	16,990,571	4,427,348	4,427,348	1,654,406	22,156,851	530,469	38,023,485

¹ Includes all coal shipped to any point in Ontario from western mines.

The apparent consumption during 1923 amounted to 38,023,485 tons, as compared with 27,596,273 tons in the preceding calendar year. In 1923, the output was 16,991,000 tons, the quantity exported amounted to 1,650,000 tons, and imports to 22,700,000 tons, resulting in an apparent consumption of 38,000,000 tons. The data given in Tables 28 and 29 show the amount of coal made available for consumption in the entire country for a period of 23 years and in each of the provinces during 1923. The data of output and of interprovincial shipments were compiled from monthly statements furnished by the coal operators.

30.—Imports into Canada of Anthracite and Bituminous Coal for Home Consumption, fiscal years 1901-1924.

Fiscal Years.	Anthracite, Free of Duty.		Bituminous Coal, Dutiable.	
	Tons.	\$	Tons.	\$
1901.....	1,933,283	7,923,950	2,516,392	4,956,025
1902.....	1,652,451	7,021,939	3,047,392	5,712,058
1903.....	1,456,713	7,028,664	3,511,421	7,776,717
1904.....	2,275,018	10,461,223	4,053,900	9,108,208
1905.....	2,604,137	12,093,371	4,176,274	8,022,896
1906.....	2,200,863	10,304,303	4,495,550	8,360,349
1907 ¹	2,014,846	9,487,574	3,807,604	7,491,045
1908.....	3,091,159	14,199,609	7,640,121	14,843,789
1909.....	3,059,663	14,034,020	6,763,352	13,151,449
1910.....	3,152,851	14,456,315	7,017,271	13,070,343
1911.....	3,465,774	15,750,340	7,745,571	14,597,268
1912.....	4,113,379	19,306,639	10,500,662	20,333,268
1913.....	4,237,310	20,399,279	11,060,910	20,447,587
1914.....	4,585,799	20,734,126	13,754,244	26,140,676
1915.....	4,383,497	20,927,539	9,124,499	16,135,920
1916.....	4,429,143	20,460,571	9,631,101	10,219,206
1917.....	4,572,440	22,806,156	12,931,075	19,270,270
1918.....	5,256,294	28,047,226	16,400,000	46,277,715
1919.....	4,752,788	26,191,798	16,569,025	44,411,207
1920.....	5,090,767	32,647,759	12,552,910	27,424,870
1921.....	4,839,559	39,058,148	15,407,996	72,239,952
1922.....	4,416,255	39,000,610	12,752,059	39,258,115
1923.....	3,162,113	28,159,041	11,166,937	44,025,436
1924.....	4,849,372	44,005,106	15,637,812	44,382,011

NOTE.—Anthracite coal dust is included under Anthracite coal. For previous years, see Year Book, 1911, page 420. ¹ Nine months.

31.—Exports of Coal, the Produce of Canada, fiscal years 1903-1924.

Fiscal Years.	Quantity.		Value.	Fiscal Years.	Quantity.		Value.
	Tons.	\$			Tons.	\$	
1903.....	1,797,951	5,542,434		1914.....	1,498,820	3,703,765	
1904.....	1,646,505	4,346,660		1915.....	1,512,487	4,466,258	
1905.....	1,615,322	3,930,802		1916.....	1,971,124	6,032,764	
1906.....	1,820,411	4,643,198		1917.....	1,899,185	6,817,035	
1907 (9 months).....	1,285,346	3,346,402		1918.....	1,902,010	8,684,038	
1908.....	1,877,258	4,810,284		1919.....	1,826,639	10,169,722	
1909.....	1,613,892	4,505,221		1920.....	2,120,138	13,183,666	
1910.....	1,826,339	5,013,221		1921.....	2,277,202	16,501,478	
1911.....	2,315,171	6,014,095		1922.....	1,953,053	13,182,440	
1912.....	1,494,756	4,338,128		1923.....	2,089,438	12,956,615	
1913.....	2,055,993	5,555,099		1924.....	1,217,835	7,842,259	

In view of the abnormal conditions prevailing in Canada during the later years of the war period, and also of the falling off of production in the United States, the Dominion Government, on July 12, 1917, appointed C. A. Magrath as Fuel Controller for Canada, charging him in the first place with the duty of stimulating shipments to Canada, and eventually extending his powers until they included the work of controlling prices and directing coal-mining operations in Canada. Mr. Magrath concluded his duties as Fuel Controller in March, 1919, but in the summer of 1922 it was again found necessary to provide machinery to handle the administrative problems directly related to the tiding-over of a threatened fuel shortage. The Dominion Fuel Board, with Charles Camsell, Deputy Minister of the Department of Mines, as chairman, was constituted on November 25, 1922, to meet the need for a standing organization definitely responsible for the systematic study of the fuel position of the Dominion. A summary of the known coal resources of Canada was given on pages 391 to 394 of the 1922-23 Year Book; the accompanying table is reproduced as Table 32.

32.—Coal Resources of Canada, by Provinces and Classes of Coal¹.

(In metric tons of 2,204 pounds.)

Provinces or Districts.	Including seams of 1 foot or over to a depth of 4,000 feet.					Including seams of 2 feet and over, at depths between 4,000 and 6,000 feet.	
	Actual Reserve.			Probable Reserve.		Probable Reserve.	
	Calculation based on actual thickness and extent.			Approximate estimate.		Approximate estimate.	
	Area, sq. miles.	Class of Coal. ³	Thousands of tons.	Area, sq. miles.	Thousands of tons.	Area, sq. miles.	Thousands of tons.
Nova Scotia.....	174	B	2,188,151	204	4,911,817	73	2,639,000
New Brunswick.....	—	B	—	121	151,000	—	—
Ontario.....	—	L	—	10	25,000	—	—
Manitoba.....	—	L	—	48	160,000	—	—
Saskatchewan.....	306	L	2,412,000	13,100	57,400,000	—	—
		L	382,500,000		491,271,000		—
Alberta.....	25,300	B	3,223,800	56,375	182,183,600	203	12,700,000
		A & B	669,000		100,000	—	—
British Columbia.....	439	A & B	23,771,242	6,196	44,907,700	11	2,160,000
		L	60,000		5,136,000	—	—
Yukon.....	—	A & B	—	2,840	250,000	—	—
		L	—		4,690,000	—	—
Northwest Territories.	—	L	—	300	4,800,000	—	—
Arctic Islands.....	—	B	—	6,000	6,000,000	—	—
Total.....	26,219	—	414,804,193 ²	85,194	801,986,117	287	17,499,000

¹ See "Coal, Coke and By-products," published by the Imperial Mineral Resources Bureau.² The coal of all classes mined in Alberta to 1911, amounting to 20,000,000 tons, has been deducted.³ A=Anthracite, B=Bituminous, L=Lignite.

World's Production.—The total known production of the world in 1922 amounted to about 1,200,000,000 long tons, toward which Canada contributed 13,500,000 long tons or about 1·1 p.c. Table 33 shows the production of the British Empire and the chief foreign countries in units of 1,000 long tons during each of the years from 1913 to 1922.

33.—Coal Production in the Principal Countries of the World, 1913-1922.

(In thousands of long tons of 2,240 pounds.)

BRITISH EMPIRE.

Years.	United Kingdom.	British India.	Canada.	Australia.	New Zealand.	Union of South Africa.
1913.....	287,431	16,208	13,404	12,418	1,888	9,583
1914.....	265,665	16,464	12,176	12,445	2,276	9,125
1915.....	253,208	17,104	11,846	11,415	2,209	8,977
1916.....	256,376	17,254	12,932	9,812	2,257	10,966
1917.....	248,500	18,213	12,542	10,232	2,068	11,444
1918.....	227,749	20,722	13,373	10,949	2,034	10,692
1919.....	229,780	22,628	12,131	10,525	1,848	9,162
1920.....	231,000	17,640	14,800	13,000	1,800	10,200
1921.....	169,720	18,964	13,777	13,287	1,809	10,501
1922.....	249,607	19,011	13,533	12,299	1,858	9,126

FOREIGN COUNTRIES.

Years.	Germany.	Belgium.	France.	Czecho-Slovakia.	Poland.	Netherlands.	Japan.	United States.
1913.....	274,264	22,474	40,188	—	—	1,843	20,973	508,893
1914.....	241,288	16,445	26,141	—	—	1,898	21,935	458,505
1915.....	230,889	13,950	19,219	—	—	2,226	20,161	474,660
1916.....	246,606	16,592	20,968	—	—	2,613	22,534	526,873
1917.....	258,639	14,691	28,427	—	—	3,001	25,938	581,609
1918.....	256,979	13,668	25,899	—	—	4,804	27,579	605,546
1919.....	199,160	18,190	19,645	27,000	—	5,271	30,000	487,638
1920.....	239,285	22,029	34,114	30,587	6,553	5,251	28,775	587,737
1921.....	255,071	21,401	37,934	32,174	7,716	8,978	25,799	452,139
1922.....	262,878	20,868	43,118	28,385	24,011	4,525	27,420	425,849

2.—Asbestos.

Canada produces more asbestos than any other country. The value of the annual output of asbestos has increased from less than \$25,000 in 1880 to \$7,522,506 in 1923, so that, aside from coal, asbestos is now one of the most important non-metallic mineral products. In 1922, the world's production amounted to 193,500 tons; of this tonnage Canada produced 163,706 tons or 85·9 p.c., Rhodesia, 14,249 tons or 7·5 p.c., South Africa, 1,668 tons or 0·9 p.c., Russia, 5,673 tons and the United States, 27 tons.

Quebec.—The Eastern Townships has for many years been the most productive asbestos-mining area in the world. The workable deposits of chief importance are confined to a serpentine belt near Black lake and Thetford. The serpentine of this belt generally occurs as disconnected masses, but occasionally it forms mountain ridges of considerable altitude, notably near Black lake. The veins of asbestos traverse the serpentine in all directions, and as a rule the fibre lies at right angles to the walls of the veins. The veins vary in width from $\frac{1}{4}$ inch to $\frac{1}{2}$ inch, and occasionally fibre has been obtained several inches in length. The fibre is of good quality and well adapted for spinning. Included in the Thetford and Black lake area are

the East Broughton deposits, where the serpentine occurs enclosed in a highly quartzose slate, probably of pre-Cambrian age. In the Danville area, asbestos up to $\frac{1}{2}$ inch in length occurs abundantly, and the whole of the serpentine is impregnated with fine, short fibre, giving a first-class milling material.

Open-cut methods of mining are adopted almost invariably throughout the Canadian asbestos fields. Nearly all the mining companies have installed machinery for the crushing, fibrizing, screening and grading of the mine product.

34.—Production of Asbestos and Asbestic in Canada, calendar years 1909-1923.

Years.	Asbestos.		Asbestic.		Total.	
	Tons.	\$	Tons.	\$	Tons.	\$
1909.....	63,349	2,284,587	23,951	17,188	87,300	2,301,775
1910.....	77,508	2,555,974	24,707	17,629	102,215	2,573,603
1911.....	101,393	2,922,062	26,021	21,046	127,414	2,943,108
1912.....	111,561	3,117,572	24,740	19,707	136,301	3,137,279
1913.....	136,951	3,830,909	24,135	19,016	161,086	3,849,925
1914.....	96,542	2,892,266	21,031	17,540	117,573	2,909,806
1915.....	111,142	3,553,166	25,700	21,819	136,842	3,574,985
1916.....	133,439	5,199,797	20,710	29,072	154,149	5,228,869
1917.....	135,502	7,183,099	18,279	47,284	153,781	7,230,383
1918.....	141,462	8,936,804	16,797	33,993	158,259	8,970,797
1919.....	136,765	10,909,452	22,471	65,917	159,236	10,975,369
1920.....	167,731	13,677,841	20,956	57,601	188,687	13,735,442
1921.....	92,761	4,906,230	1	1	92,761	4,906,230
1922.....	163,706	5,552,723	1	1	163,706	5,552,723
1923.....	231,482	7,522,506	1	1	231,482	7,522,506

¹ Included with asbestos.

3.—Other Non-Metallic Minerals.

Natural Gas.—The production of natural gas has increased in value from \$1,300,000 in 1910 to \$5,884,618 in 1923. The producing gas wells are situated in the counties of Welland, Haldimand, Norfolk, Kent, Essex and Bruce, in Ontario, at Moncton, New Brunswick, and at Medicine Hat and vicinity, in Alberta. The quantity of gas sold or used in 1923 was over 15,937,000 million feet. Of the total value, Ontario was credited with about 51 p.c.

Petroleum.—The production of crude petroleum comes almost entirely from the province of Ontario. The production of Canada in 1923 was 170,169 barrels, of which 159,400 barrels came from Ontario and 8,826 barrels from New Brunswick. The principal producing oil fields are situated in the peninsula of southwestern Ontario between lake Huron and lake Erie. The oil districts are all situated within an area underlain by Devonian strata, usually in an anticlinal axis, and the petroleum is largely obtained from the horizons in the Onondaga at varying depths in the different localities. The Alberta production in 1923 was 1,943 barrels, a decline of 3,665 barrels from the previous year's total and 9,089 barrels from the 1920 record. Wells near Black Diamond, Turner Valley field, were responsible for the main portion of the production.

Gypsum.—Many large deposits of gypsum occur throughout Canada, but the production is chiefly from Windsor, Nova Scotia, Hillsborough, New Brunswick, Paris, Ontario, and Gypsumville, Manitoba. The Hillsborough deposit of gypsum in New Brunswick is of very high grade. There are also extensive deposits in British Columbia which are being worked by one company only. Nearly 50 p.c. of Canada's production is exported in crude forms. Beds of gypsum are associated with the lower Carboniferous limestones in New Brunswick and Nova Scotia. The mineral occurs in Ontario in the salt-bearing Salina formation of Upper Silurian age.

Salt.—Practically the whole of the production comes from Windsor, Ontario, but the Malagash deposits in Nova Scotia are claiming much attention. The deposits of Ontario occur in the Salina formation of Upper Silurian age, in which the beds of the mineral sometimes reach a thickness of 250 feet. The production in 1923 was 202,397 tons, as compared with 181,794 tons in 1922.

5.—Clay Products and Structural Materials.

Brick and Tile.—The widespread clays of glacial and post-glacial age that often completely hide the underlying rocks over considerable areas of the St. Lawrence lowlands have furnished the material for numerous brick and tile industries, both in Ontario and Quebec. The brick production in 1923 was about 396,400,000 as compared with 401,800,000 in 1922.

Cement.—The raw materials for the manufacture of Portland cement are found throughout the St. Lawrence lowlands, and support a number of large industries. Some of these utilize the deposits of clay and calcium-carbonate marl which accumulated in lakes scattered over the uneven surface of the glacial moraines, while others use Palæozoic limestone. The production of cement increased from 5,752,885 brl. in 1921 to 6,943,972 brl. in 1922, and 7,543,589 brl. in 1923.

35.—Production of Cement in Canada, calendar years 1902-1923.

Years.	Natural rock cement.		Portland cement.		Total cement.	
	Brl.	\$	Brl.	\$	Brl.	\$
1902.....	127,931	98,932	594,594	1,028,618	722,525	1,127,550
1903.....	92,252	74,655	627,741	1,150,592	719,993	1,225,247
1904.....	56,814	50,247	910,358	1,287,992	967,172	1,338,239
1905.....	14,184	10,274	1,346,548	1,913,740	1,360,732	1,924,014
1906.....	8,610	6,052	2,119,764	3,164,807	2,128,374	3,170,859
1907.....	5,775	4,043	2,436,093	3,777,328	2,441,868	3,781,371
1908.....	1,044	815	2,665,289	3,709,139	2,666,333	3,709,954
1909.....	—	—	4,067,709	5,345,802	4,067,709	5,345,802
1910.....	—	—	4,753,975	6,412,215	4,753,975	6,412,215
1911.....	—	—	5,692,915	7,644,537	5,692,915	7,644,537
1912.....	—	—	7,132,732	9,106,556	7,132,732	9,106,556
1913.....	—	—	8,658,805	11,019,418	8,658,805	11,019,418
1914.....	—	—	7,172,480	9,187,924	7,172,480	9,187,924
1915.....	—	—	5,681,032	6,977,024	5,681,032	6,977,024
1916.....	—	—	5,369,560	6,547,728	5,369,560	6,547,728
1917.....	—	—	4,768,488	7,724,246	4,768,488	7,724,246
1918.....	—	—	3,591,481	7,076,503	3,591,481	7,076,503
1919.....	—	—	4,995,257	9,802,433	4,995,257	9,802,433
1920.....	—	—	6,651,980	14,798,070	6,651,980	14,798,070
1921.....	—	—	5,752,885	14,195,143	5,752,885	14,195,143
1922.....	—	—	6,943,972	15,438,481	6,943,972	15,438,481
1923.....	—	—	7,543,589	15,064,661	7,543,589	15,064,661

36.—Imports into Canada of Portland Cement, fiscal years 1898-1924.

Fiscal years.	Quantity.	Value.	Duty paid.	Fiscal years.	Quantity.	Value.	Duty paid.
	Cwt.	\$	\$		Cwt.	\$	\$
1898.....	1,073,058	355,264	121,969	1912.....	2,592,025	936,425	292,914
1899.....	1,300,424	467,994	147,146	1913.....	4,958,814	1,955,177	597,727
1900.....	1,301,361	498,607	147,067	1914.....	709,104	322,564	69,658
1901.....	1,612,432	654,595	179,550	1915.....	287,402	123,613	26,034
1902.....	1,971,616	833,657	233,754	1916.....	94,136	37,048	9,382
1903.....	2,316,853	868,131	271,004	1917.....	63,074	29,719	6,307
1904.....	2,476,388	995,017	290,778	1918.....	26,243	17,417	2,624
1905.....	3,228,394	1,234,649	384,866	1919.....	26,687	26,437	2,667
1906.....	2,848,582	963,839	328,342	1920.....	45,458	47,156	3,720
1907 ¹	1,551,493	523,120	162,250	1921.....	132,187	153,513	10,502
1908.....	2,427,381	852,041	259,549	1922.....	24,952	34,304	1,920
1909.....	1,460,850	475,676	159,077	1923.....	112,610	90,849	8,494
1910.....	490,809	158,487	47,984	1924.....	61,466	75,758	4,412
1911.....	1,283,721	494,081	138,969				

¹ Nine months.

VII.—WATER POWERS.

1.—Water Powers of Canada.¹

Prior to the world war, the price of fuels was so low that ample motive power could be secured through their agency at such reasonable cost that the development of water power only took place where the natural facilities greatly favoured it or where coal costs were relatively high. With the advent of war, coal costs soared and supplies became uncertain; at the same time, power requirements became vastly greater and stimulated the development of water power. The return of peace has not produced any marked amelioration in the coal situation, while the gradual revival of industrial activity is steadily increasing the demand for power which the end of the war had considerably reduced.

At the present time, water power development is active wherever conditions are favourable, and there can be little doubt that this activity will be increased with the improvement of financial and industrial conditions.

The United States Geological Survey in 1921 issued an atlas illustrating the water power resources of the world, which it places at 439,000,000 horsepower, 43·3 p.c. of which is in Africa and 14·1 p.c. in North America.

In Table 1, which is based upon the latest official or other reliable information available, are listed the more important water power countries, together with their population and developed water power. It is interesting to note that, with the exception of Norway and Switzerland, Canada has the greatest *per capita* development, and next to the United States, the greatest actual development.

1.—Developed Water Power of Leading Countries, 1923.

Countries.	Population (in thousands).	Developed Water Power.	
		H.P. (in thousands).	Per 1,000 population.
Canada.....	9,085	3,227	355
France.....	40,000	2,200	55
Germany.....	60,000	1,000	17
Italy.....	39,000	2,300	59
Japan.....	60,000	1,500	23
Norway.....	2,700	1,820	627
Sweden.....	6,000	1,600	266
Switzerland.....	4,000	1,750	437
United States.....	109,830	10,455	95

With this brief reference to the water powers of the world, we may proceed to a more particular consideration and analysis of those of the Dominion. It has already been shown that Canada is richly endowed with water power resources and is in the forefront as regards their utilization. In fact, practically every large industrial centre throughout the Dominion is now served with hydro-electric energy and has within easy transmission distance ample reserves for the future. Over 90 p.c. of the prime motive power of the central electric stations of Canada is hydro power. The main spring of industrial progress in the central provinces, which have no indigenous coal supplies, is water power. Table 2 shows the distribution of available and developed power in Canada.

¹ By J. B. Challies, C.E., M.E.I.C.

2.—Available and Developed Water Power in Canada, Feb. 1, 1924.

Provinces.	Available 24-hour power at 80 p.c. efficiency.		Turbine installation.
	At ordinary minimum flow.	At estimated flow for maximum development (dependable for 6 months).	
	h.p.	h.p.	h.p.
British Columbia.....	1,931,142	5,103,460	355,517
Alberta.....	475,281	1,137,505	33,067
Saskatchewan.....	513,481	1,087,756	—
Manitoba.....	3,270,491	5,769,444	162,025
Ontario.....	4,950,300	6,808,190	1,445,480
Quebec.....	6,915,244	11,640,052	1,116,398
New Brunswick.....	50,406	120,807	44,539
Nova Scotia.....	20,751	128,264	54,950
Prince Edward Island.....	3,000	5,270	2,239
Yukon and Northwest Territories.....	125,220	275,250	13,199
Total.....	18,255,316	32,075,998	3,227,414

The figures in columns 1 and 2 in the above table represent 24-hr. power, and are based upon rapids, falls and power sites of which the actual existent drop or the head possible of concentration, is definitely known or at least well established. Innumerable rapids and falls of greater or lesser power capacity, which are not as yet recorded, are scattered on rivers and streams from coast to coast and will only become available for tabulation as more detailed survey work is undertaken and completed. This is particularly true of the less explored northern districts. Nor is any consideration given to the power concentrations which are feasible on rivers and streams of gradual gradient, where economic heads may be created by the construction of power dams, excepting only at such points as definite studies have been carried out and the results made matters of record.

The figures in column 3 represent the actual water wheels installed throughout the Dominion. These figures should not be placed in direct comparison with the available power figures in columns 1 and 2 for the purpose of deducing therefrom the percentage of the available water power resources developed to date. The actual water wheel installation throughout the Dominion averages 30 p.c. greater than corresponding maximum available power figures calculated as in column 3. The figures quoted above, therefore, indicate that the "at present recorded water power resources" of the Dominion will permit of a turbine installation of 41,700,000 h.p. In other words, the present turbine installation represents only 8 p.c. of the present recorded water power resources.

The above figures may be said to represent the minimum water power possibilities of the Dominion. To illustrate, the detailed analyses which have been made of the water power resources of the provinces of New Brunswick and Nova Scotia have disclosed most advantageous reservoir facilities for regulating stream flow. It is estimated that the two provinces possess within their respective borders 200,000 and 300,000 commercial h.p. These figures provide for a diversity factor between installed power and consumers' demands.

Table 3 analyses the developed water power, and shows the extent to which the great pulp and paper industry of the Dominion owes its development to water power.

The statistics concerning the central station industry are further analysed in Table 4. The territory served by and the primary power installed in central stations are graphically indicated on the map facing page 390 and the diagram facing page 392 of the 1921 Year Book, to which the reader is referred. The statistics concerning the pulp and paper industry are analysed in Table 5.

During 1923, installations were made which amounted to practically 255,000 h.p., this figure including both new construction and the erection of new turbines and generators in existing water power stations. At the present time there are new developments either in course of construction or actively projected, the ultimate capacity of which is more than 900,000 h.p. There is every indication that for a long time to come the development of water power in Canada will make great and continued progress.

3.—Developed Water Power in Canada, Feb. 1, 1924.

Provinces.	Turbine Installation in H.P.				
	In Central Stations. ¹	In Pulp and Paper Mills. ²	In other industries. ³	Total. ⁴	Per 1,000 population. ⁵
British Columbia.....	242,401	55,140	57,976	355,517	642
Alberta.....	32,380	—	687	33,067	52
Saskatchewan.....	—	—	—	—	—
Manitoba.....	145,625	—	16,400	162,025	252
Ontario.....	1,142,403	174,189	128,888	1,445,480	477
Quebec.....	791,795	237,232	87,371	1,116,398	457
New Brunswick.....	23,613	13,728	7,198	44,539	112
Nova Scotia.....	23,196	17,331	14,423	54,950	103
Prince Edward Island.....	288	—	1,951	2,239	25
Yukon.....	10,000	—	3,199	13,199	1,158
Canada.....	2,411,701	497,620	318,093	3,227,414	353

¹ Includes only hydro-electric stations which develop power for sale. ² Includes only water power actually developed by pulp and paper companies. In addition to this total, pulp and paper companies purchase from the hydro-power central stations, totalled in column 1, 96,985 h.p. in Ontario, 131,120 h.p. in Quebec and 650 h.p. in New Brunswick. The total hydro power utilized in the pulp and paper industry is therefore 726,375 h.p. ³ Includes only water power actually developed in connection with industries other than the central station and the pulp and paper industries. These industries also purchase blocks of power from the central stations totalled in column 1. ⁴ Total of all turbines and water wheels installed in Canada. ⁵ Average of developed water power per 1,000 population.

4.—Developed Water Power in Canada utilized in the Central Electric Station Industry, Feb. 1, 1924.

Provinces	Commercial Stations. ¹			Municipal Stations. ²			Total.				
	Installation.			Installation.			Installation.				
	No.	Generator K.V.A.	Turbine H.P.	No.	Generator K.V.A.	Turbine H.P.	No.	Generator K.V.A.	H.P. per turbine unit.	H.P. per station.	Total turbine H.P.
British Columbia	24	153,686	232,356	8	6,353	10,045	32	160,039	4,108	7,375	242,401
Alberta.....	3	22,250	32,380	—	—	—	3	22,250	2,414	10,793	32,380
Saskatchewan.....	—	—	—	—	—	—	—	—	—	—	—
Manitoba.....	4	58,350	78,400	2	57,312	67,225	6	115,662	6,935	24,271	145,625
Ontario.....	69	395,659	503,375	37	457,472	639,028	106	853,131	4,109	10,777	1,142,403
Quebec.....	79	606,813	771,820	17	14,962	19,975	96	621,775	3,552	8,248	791,795
New Brunswick..	7	8,460	11,703	3	9,363	11,910	10	17,823	1,073	2,361	23,613
Nova Scotia.....	9	3,204	3,749	12	15,389	19,447	21	18,593	828	1,124	23,196
Prince Edward I.	7	331	288	—	—	—	7	331	32	41	288
Yukon.....	1	6,000	10,000	—	—	—	1	6,000	5,000	10,000	10,000
Canada.....	203	1,254,753	1,644,071	79	560,851	767,630	282	1,815,604	3,682	8,552	2,411,701

¹ Commercial Stations include all privately owned. ² Municipal stations include all publicly owned.

NOTE.—Statistics in this table are based upon a census of the industry made by the Dominion Bureau of Statistics in co-operation with the Dominion Water Power Branch.

**5.—Developed Water Power in Canada utilized in the Pulp and Paper Industry,
Feb. 1, 1924.**

Provinces.	No. of Mills.	Installed and Purchased Power—H.P.				
		Turbine installation in the Industry.			Purchased Hydro- Electric Power. ⁴	Total Hydro- Elec. (Col. 3+ Col. 5). ⁵
		Direct drive. ¹	Hydro- Electric drive. ²	Total. ³		
British Columbia.....	5	26,790	28,350	55,140	—	28,350
Ontario.....	46	89,066	85,123	174,189	96,985	182,108
Quebec.....	56	151,792	85,440	237,232	131,120	216,560
New Brunswick.....	4	2,668	11,060	13,728	650	11,710
Nova Scotia.....	10	17,251	80	17,331	—	80
Canada.....	121	287,567	210,053	497,620	228,755	438,895
						726,375

¹ Includes all turbines actually installed in the industry and directly driving mill equipment. ² Includes all turbines actually installed in the industry and transmitting power through electric drive. ³ Total of the turbine capacity actually installed in the industry. ⁴ Includes only power purchased from hydro-electric central stations for the operation of pulp and paper mills. ⁵ Total of the hydro-electric power used in the industry. ⁶ Total of the water power used in the industry.

2.—Central Electric Stations.

The development of the central electric power industry was greatly stimulated during the war by the urgent need of power for the manufacture of war munitions. In Table 6 will be found statistics of the number of central electric stations, capital invested, revenue from sale of power, total horse power, kilowatt hours generated and number of subscribers for the seven-year period ended 1923, together with the number of persons employed and the amount expended for salaries and wages.

6.—Statistics of Central Electric Stations, calendar years 1917-1923.

Years.	Number of stations. ¹	Capital invested.	Revenue from sale of power.	Total horse power.	Kilowatt hours generated.	Sub- scribers.	Persons em- ployed.	Salaries and wages.
		\$	\$		(thous- sands.)			\$
1917.....	666	356,004,168	44,536,848	1,844,571	—	—	8,847	7,777,715
1918.....	795	401,942,402	53,549,133	1,841,114	—	—	9,696	10,354,242
1919.....	805	416,512,010	57,853,392	1,907,135	5,497,204	—	9,656	11,487,132
1920.....	819	448,273,642	65,705,060	1,897,024	5,894,867	894,158	10,693	14,626,709
1921.....	857	484,669,451	73,376,580	1,977,857	5,614,132	973,212	10,714	15,234,678
1922.....	905	568,068,752	82,328,866	2,258,398	6,740,750	1,053,545	10,634	14,495,250
1923.....	532	581,472,583	91,141,296	2,423,845	8,099,192	1,122,900	11,094	14,784,038

¹Excluding non-generating stations in 1923.

The primary power equipment of all central electric stations aggregated 2,423,845 h.p. in 1923. This included water wheels and turbines, steam reciprocating engines and turbines and internal combustion engines. The hydraulic power machines greatly predominated over the other prime movers, providing over 94 p.c. of the total capacity, with steam turbines, steam reciprocating engines and internal combustion engines making up the remaining 6 p.c. Not included in the above were steam engines and internal combustion engines, with a capacity of 149,572 h.p. or 6.5 p.c. of the total water power capacity, installed in water power stations as auxiliary or standby equipment.

Central electric stations that have no water power, but are operated by steam and internal combustion engines, are on the whole small stations. Of the 159 steam reciprocating engines installed in central electric stations in 1923, only 16 in number, or about 10 p.c., were over 500 h.p. The steam turbines averaged over 2,000 h.p., with 5 units averaging over 5,000 h.p., but there were only 38 steam turbines in the industry and these were confined to 20 stations, whereas the 641 water wheels and turbines averaged over 3,500 h.p.

The majority of the fuel-using stations are primarily for lighting purposes, using the cheapest fuel procurable, generally local coal. In the Prairie Provinces, lignite coal is used for the steam engines and gasoline, oil distillates and producer gas for the internal combustion engines.

Of the 262 internal combustion engines in central electric stations in 1923, 144 or over 50 p.c. were in Saskatchewan, 50 in Alberta and 16 in Manitoba.

During 1923 the fuel stations produced an aggregate of 158,023,000 kilowatt hours at a cost for fuel of \$2,638,888, or at an average of 1.67c. per kilowatt hour. This production was, however, less than 2 p.c. of the total output, hydro-electric stations producing over 98 p.c. The auxiliary equipment in hydraulic stations consumed fuel valued at \$680,064, but no record is available of their output of current.

The distribution by provinces of the electric energy generated in central electric stations throughout Canada is shown in Table 7 for the calendar years 1921, 1922 and 1923. In the latter year more than 85 p.c. of the total generated electric energy was produced in the leading industrial provinces of Ontario and Quebec. From Table 9 it is seen that the total of electric energy exported in the fiscal year ended March 31, 1924, was 1,400,231,340 kilowatt hours or about 17 p.c. of the amount produced in the calendar year 1923, the nearest corresponding period.

**7.—Electrical Energy Generated in the calendar years 1921-1923,
by Provinces.**

Provinces.	Kilowatt hours ("000" omitted).			Provinces.	Kilowatt hours ("000" omitted).		
	1921.	1922.	1923.		1921.	1922.	1923.
Prince Edward I..	1,271	1,368	1,431	Saskatchewan.....	54,295	57,624	60,090
Nova Scotia.....	34,330	36,910	41,848	Alberta.....	115,580	122,568	122,113
New Brunswick.....	30,351	37,009	37,521	British Columbia..	499,095	522,675	577,240
Quebec.....	1,790,805	2,539,874	2,816,397	Yukon.....	8,927	8,637	11,358
Ontario.....	2,808,246	3,151,460	4,121,733				
Manitoba.....	271,232	262,625	309,461	Total.....	5,614,132	6,740,750	8,099,192

Electric Light and Power.—Electric light and power companies are subject to registration and inspection under the Electricity Inspection Act, 1907 (6-7 Edw. VII, c. 14), and the production of electrical energy for export is regulated by the Electricity and Fluid Exportation Act, 1907 (6-7 Edw. VII, c. 16). Both Acts were administered by the Department of Inland Revenue until September 1, 1918, when, by Order in Council of June 3, 1918, their administration was transferred to the Department of Trade and Commerce. The statistics published in connection with these Acts are given in Tables 8 and 9. The number of electric light companies registered under the above-mentioned Act (see Table 8) has increased from 398 in 1910 to 1,229 in 1924, and the export of electric energy from 538,331,425 kilowatt hours in 1911 to 1,400,231,340 kilowatt hours in 1924.

8.—Number of Electric Light and Power Companies registered under the Electricity Inspection Act in the fiscal years 1915-1924.

Provinces.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.	1924.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Prince Edward Island.....	6	6	7	7	8	11	11	11	12	12
Nova Scotia.....	35	35	38	36	37	37	45	55	59	61
New Brunswick.....	24	24	23	25	25	27	28	30	38	45
Quebec.....	53	61	79	94	133	140	184	216	226	280
Ontario.....	282	287	308	317	328	328	371	419	424	480
Manitoba.....	16	16	18	20	23	23	25	46	59	63
Saskatchewan.....	54	54	58	59	65	86	93	101	118	131
Alberta.....	36	36	41	45	47	53	46	65	76	108
British Columbia.....	55	55	60	60	62	63	77	82	84	49
Yukon.....	—	—	—	—	—	—	—	—	—	—
Total	561	574	632	663	725	768	880	1,025	1,096	1,229

9.—Electrical Energy generated or produced for export under authority of the Electricity and Fluid Exportation Act during the fiscal years 1919-1924.

Companies.	Electrical Energy Generated or Produced for Export.					
	1919.	1920.	1921.	1922.	1923.	1924.
	k.w. hours.	k.w. hours.	k.w. hours.	k.w. hours.	k.w. hours.	k.w. hours.
Ontario Power Company of Niagara Falls, Ontario.....	316,921,400	319,362,000	328,256,600	304,224,400	295,849,500	341,323,900
Canadian Niagara Power Company, Niagara Falls, Ont..	254,633,727	203,601,550	172,251,210	82,264,000	244,948,750	346,930,250
Electrical Development Company (Toronto Power Co.), Niagara Falls, Ont.....	141,511,000	108,237,000	102,884,000	102,122,000	103,922,550	222,215,400
Ontario and Minnesota Power Company, Fort Frances, Ont..	18,060,373	12,043,120	15,803,451	12,729,010	8,606,760	12,065,000
Maine and New Brunswick Electric Power Company, Ltd., Aroostook Falls, N.B.....	4,954,661	6,122,638	7,877,398	8,460,291	10,713,925	10,546,707
British Columbia Electric Ry. Co., Vancouver, B.C....	290,530	354,780	385,678	419,692	467,353	754,558
Western Canada Power Co., Vancouver, B.C.....	9,373,700	14,541,734	21,626,236	24,825,300	32,457,700	40,531,531
Sherbrooke Railway and Power Company, Sherbrooke, Que.....	265,378	273,696	281,038	252,200	212,347	14,400
Cedars Rapids Mfg. and Power Co., Cedars Rapids, Que....	395,966,000	282,225,000	364,432,000	324,193,000	356,795,000	425,304,000
West Kootenay Power and Light Co., Ltd., Rossland, B.C.....	1,301,200	2,997,000	5,774,400	2,084,900	898,700	545,600
Total	1,143,277,969	949,758,518	1,019,572,011	861,574,793	1,054,872,585	1,400,231,340

3.—Public Ownership of Hydro-Electric Power.

When, in the early years of the twentieth century, it became evident that the development of hydro-electric power would become a "key industry" in Canada, more especially in its coalless central provinces of Ontario and Quebec, a strong movement arose in favour of conserving the water-powers of the country for the public benefit instead of allowing them to pass into the hands of private corporations. This "public ownership" movement developed especial strength in Ontario and finally led to the establishment of the Ontario Hydro-Electric Commission, the operating statistics of which are given below. In more recent years, Manitoba, Nova Scotia and New Brunswick have established Hydro-Electric Commissions on the model of the Ontario system. In Quebec, on the other hand, the development of hydro-electric power has been left in the hands of private corporations.

1.—The Hydro-Electric Power Commission of Ontario.

The hydro-electric power scheme in Ontario had its beginning in 1903, when seven municipalities, (Toronto, London, Brantford, Stratford, Woodstock, Ingersoll and Guelph), united in an investigation of the transmission possibilities of Niagara power. The Ontario Power Commission, which was created to report on the question, favoured the construction of a generating plant at Niagara Falls, and the Hydro-Electric Power Commission of Ontario was formed in 1906 to carry out its recommendations.

The capital required by the Commission for its transmission plant was provided by issues of bonds, guaranteed by the Government of Ontario, whose security was something more corporate than that of the associated municipalities. The contracts between the Commission and the municipalities called for repayment to the Government in thirty years.

When a municipality wishes to become part of the Hydro system, an engineer of the Commission reports on the cost of connection with the existing transmission lines. Then the question of joining the Hydro is voted upon under a civic by-law, which, if passed, is followed by another giving the necessary money. The local distribution system is financed by an issue of municipal debenture bonds to be retired in twenty years. Monthly bills are sent by the Commission to the municipalities, based upon an approximation to the yearly expense incurred in supplying power to the municipality, and at the year's end a thirteenth statement is sent, which brings the approximation to a true account. Like any efficient business concern, the Commission makes provision from the charges for power for sinking funds, repairs and replacements.

The Commission had been given authority to generate its own power, but chose rather to contract for power from the Ontario Power Company at \$9.40 for the first 25,000 h.p. and \$9.00 for any in addition up to 100,000 h.p. In 1916 power was purchased from the Canadian Niagara Power Company as well, and in the following year the Ontario Power Company was acquired through purchase of practically all the stock. It was at this time that the Queenston-Chippawa development was begun. Of the total drop of 327 feet between lake Erie and lake Ontario, an effective head of 305 feet is obtained by the Queenston-Chippawa development. This effective head is about twice that utilized by the plant located at the falls. This means that the efficiency of utilization of the water diverted from Niagara falls has been doubled, and for each cubic foot per second, instead of 15 h.p., approximately 30 h.p. is now developed.

The Queenston-Chippawa development was begun in 1917 as a war measure, when the consumption of power in munition factories was greatest, at a time when the duration of the war could not be foreseen. High wage costs and high prices of material placed construction costs far above the original estimate of \$10,500,000, besides which the ultimate capacity of the plant was enlarged. The cost of completing the first five units, totalling 275,000 h.p., is now estimated at approximately \$60,000,000.

The first of these units began operation on December 28, 1921; three others commenced operations in 1922 and the fifth in 1923. Three additional units, each with a capacity of 55,000 h.p., are in process of installation.

Hydro-Electric Power Statistics.—The Canada Year Book of 1910 (p. xliii) described the installation on October 11, 1910, at Berlin, now Kitchener, Ontario, of electrical energy generated by the Niagara falls, and the initial work carried out by the Ontario Hydro-Electric Power Commission for the supply of electrically generated power to 15 municipalities. The growth of the Hydro system in Ontario is shown in the amount of power used by its customers. In 1910, the Commission supplied 750 h.p. to 10 municipalities; in 1915, 100,242 h.p. to 99 municipalities; in December, 1923, the amount of power taken was 350,486 h.p. "The government electric utilities in Ontario have grown from a league of seven municipalities formed in 1903 until now the vested interests of the people in this class of property are represented by investments totalling nearly \$250,000,000, the bonded indebtedness of which is guaranteed by the Province of Ontario."

In Table 10 will be found a consolidated operating report of the Hydro-Electric Power Commission for the years 1912 (the earliest year for which the statistics are available) to 1923. The table shows that, during the 12-year period covered, the number of municipalities securing electricity from the Commission has increased from 28 to 224, the number of consumers from 34,967 to 348,028, the earnings from \$1,617,674 to \$17,219,044, and the operating expenses from \$1,377,168 to \$15,208,508.

10.—Consolidated Operating Report of the Hydro-Electric Power Commission of Ontario, 1912-1923.

Years.	Number of municipalities.	Number of consumers.	Horse-power used.	Earnings.	Expenses.
				\$	\$
1912.....	28	34,967	-	1,617,674	1,377,168
1913.....	45	65,697	-	2,617,440	2,041,183
1914.....	69	96,744	70,698	3,433,656	2,678,328
1915.....	99	120,028	100,242	4,070,295	3,371,414
1916.....	128	148,732	120,768	4,983,601	4,140,066
1917.....	143	170,916	157,048	6,070,065	5,077,491
1918.....	166	183,987	159,990	7,082,039	5,736,335
1919.....	181	216,086	186,355	7,827,055	6,531,482
1920.....	184	245,666	208,232	9,707,901	8,094,056
1921.....	205	268,743	242,349	10,981,942	9,317,781
1922.....	214	303,090	294,061	12,756,104	11,343,766
1923.....	224	348,028	350,486	17,219,044	15,208,508

The assets and liabilities of the Commission, as reported for the year ended Oct. 31, 1923, are each given as \$144,320,788. Advances to the Commission by the Provincial Treasurer constitute nearly 80 p.c. of the liabilities, being \$114,731,925, while debentures issued total \$12,358,311, reserves \$7,345,249 and liabilities in respect of radial railway undertakings, the only other large liability, \$7,390,011. Of the assets, the sum of \$69,397,063 represents investments in the Niagara Power Development Works, \$25,306,477 in the Niagara System, \$21,750,547 in stocks and other securities held; \$7,930,625 are assets in respect of railway undertakings and about \$13,500,000 is invested in the various systems operated other than the Niagara System.

In Table 11 will be found the financial statistics of the electrical installations of the municipalities served by the Hydro-Electric Commission for the four years 1920 to 1923. A very rapid growth will be noticed.

11.—Statement of Earnings and Operating Expenses of Electric Departments of Municipalities served by the Ontario Hydro-Electric Commission for the calendar years 1920-1923.

Items.	1920.	1921.	1922.	1923.
Number of municipalities.....	184	205	214	224
Earnings—	\$	\$	\$	\$
Domestic Light.....	2,546,345	3,149,080	3,786,608	5,166,452
Commercial Light.....	1,512,855	1,851,502	2,158,306	3,260,773
Power.....	3,752,188	3,895,437	4,383,913	5,927,666
Power, Municipal.....	532,279	654,531	973,263	1,161,599
Street Light.....	1,005,535	1,060,358	1,160,447	1,269,604
Rural.....	168,920	145,566	105,877	116,639
Miscellaneous.....	189,779	225,468	187,690	316,311
Total Earnings.....	9,707,901	10,981,942	12,756,104	17,219,044
Expenses—				
Power purchased.....	4,216,668	4,876,650	6,636,853	8,699,027
Sub-Station Operation.....	285,407	314,838	315,444	474,442
“ “ Maintenance.....	102,051	104,798	100,764	133,816
Dist. System, Operation and Maintenance.....	344,552	479,406	519,252	636,477
Line Transformers Maintenance.....	46,323	65,088	52,932	75,920
Meters.....	123,701	116,723	107,807	139,105
Consumers' Premises—Expenses.....	116,284	134,855	143,389	218,682
Street Light System, Operation and Maintenance....	236,931	297,482	297,364	299,579
Promotion of Business.....	78,295	101,804	129,933	184,371
Billing and Collecting.....	295,943	321,686	338,154	444,307
General Office, Salaries and Expenses.....	559,695	656,268	605,852	937,453
Undistributed expenses.....	256,400	317,387	385,895	359,207
Interest and Debenture Payments.....	1,431,807	1,530,796	1,710,127	2,606,112
Total Expenses.....	8,094,657	9,317,781	11,343,766	15,208,595
Surplus.....	1,613,244	1,664,161	1,412,338	2,010,536
Depreciation Charge.....	902,029	1,044,435	715,814	916,783
Surplus less Depreciation Charge.....	711,215	619,726	696,524	1,093,753

Statistics of the assets and liabilities of the electric departments of the municipalities served by the Hydro-Electric Commission are given in Table 12. These show total assets of \$63,025,339 in 1923, as compared with liabilities of \$38,963,826. Of the difference, \$10,258,463 is assigned as reserves, leaving a surplus of \$13,803,050. The above assets are exclusive of the assets of the Hydro-Electric Commission shown above.

2.—Hydro-Electric Power Commissions in other Provinces.

Québec.—The Quebec Streams Commission, created originally by 1 Geo. V, c. 5, and given additional powers by 3 Geo. V, c. 6, is authorized to ascertain the resources of the waters of the province, to make recommendations regarding their government and operation and to carry out certain damming and similar operations. The Commission has not undertaken the direct production of electric power, but has provided assistance to power development and pulp and paper companies engaged in such works. It has itself constructed dams on several of the more important rivers, notably the St. Maurice, the St. Francis and at the mouth of lake St. John and at lake Kenogami. Its activities are closely allied with the pulp and paper industry of the province.

Nova Scotia.—The Nova Scotia Power Commission operates two generating stations at St. Margaret's bay, N.S., one on the North East river, about two miles up from the mouth of the stream, operating under a head of 156 ft. and developing 3,900 h.p., and the other at tidewater near the mouth of the North East river, operating under a head of 90 ft. and developing a total of 6,900 h.p.

The hydro-electric station of the Lunenburg Gas Co. on the Mushamush river, a mile from Mahone, was also purchased and rebuilt. This plant operates under a head of 22 ft. and develops 700 h.p. The Commission is generating and, at present, selling all its power from the St. Margaret's bay plants to the Nova Scotia Tramways and Power Co., and is selling power from the Mahone plant to the Lunenburg Gas Co. for distribution in Lunenburg and Riverport.

New Brunswick.—The New Brunswick Electric Power Commission has constructed a power plant at the mouth of the Musquash river, operating under a head of 95 ft. with turbines aggregating 11,100 h.p. The plant commenced operation in May, 1923, and delivers power to the municipalities of St. John, Moncton, Fairville, Westfield, Fairvale, Hampton, Norton, Sussex, Apohaqui, Petitcodiac and Salisbury. The Commission is also buying power from the Bathurst Co. and selling it to the town of Newcastle.

Manitoba.—The Manitoba Power Commission entered into a contract with the city of Winnipeg for a supply of power and built 164 miles of transmission lines from Winnipeg, connecting Oakville, Portage la Prairie, Carman, Morden and Roland. The Commission purchased the hydro plant of the Minnedosa Power Co. and also built a fuel plant at Virden equipped with two oil engines aggregating 240 h.p. The Minnedosa plant is equipped with a 125 h.p. water turbine operating under a head of 19 ft. and two oil engines of 120 h.p. each. Minnedosa and Virden are not connected with the system of transmission lines, but are separately operated units.

VIII.—MANUFACTURES.

1.—Evolution of Canadian Manufactures.

Manufacture is defined as the operation of making wares from raw materials, by the hands, by tools or by machinery, thus adding, in the phraseology of the economist, new utilities and therefore additional value, to the already existing utilities and values of the raw material. Manufacture, in primitive societies and in the pioneer stages of new communities, is normally carried on within the household for the needs of the household, as was the case among the early settlers of Canada in the seventeenth and eighteenth centuries when domestic manufactures were carried on in combination with the cultivation of the soil, mainly at the times of the year when agricultural operations were suspended. At a later period in the evolution of society, small manufactures were carried on in specialized workshops for the needs of the immediate locality or neighbourhood, as was generally the case in Eastern Canada in the first half of the nineteenth century. Later still, as a consequence of the introduction of machinery operated by steam or electric power—the so-called “Industrial Revolution”—and of the cheapening of transportation, manufacture has to an ever-increasing extent been concentrated in factories, often employing hundreds and even thousands of persons and producing for a national or even for an international market. So far as Canada is concerned, this “industrial revolution” may be said to have commenced shortly before Confederation and to be still in progress. The growth of manufacturing production since 1870 is outlined in this article and the accompanying Table 1, while the increasing importance of Canadian manufacturing for the international market may be illustrated by the statistics of Table 7 of the Trade and Commerce section of the 1920 Year Book, which shows that Canadian exports of manufactured produce increased from less than \$3,000,000 per annum on the average of 1871-1875 to \$614,000,000 in the post-war fiscal year ended March 31, 1920 and \$416,000,000 of “fully or chiefly manufactured” products in the fiscal year ended March 31, 1924.

The Earliest Manufactures.—The type of manufactures to be established in a community will in the beginning be largely determined, more especially where transportation charges are high, by the raw materials available in that community. For example, probably the first agricultural process to be carried on by Europeans in what is now the Dominion of Canada was the raising of a crop of grain at Port Royal, Nova Scotia, in 1605; the first corresponding manufacturing process was the grinding of the grain in the autumn of that year. Other early manufactures were also necessarily connected with the satisfaction of the primary needs of human beings for food, clothing and shelter, and with the other primary need for protection. At a census of occupations taken in 1681, we find enumerated a comparatively large number of tailors and shoemakers, masons and carpenters, gunsmiths and edge-tool makers.

The earlier manufactures were necessarily of a rather crude and primitive type, concerned with the production of commodities which were too bulky to bear the heavy transportation charges of those days, when only one round trip *per annum* could be made between France and Quebec, and vessels were constantly subject to the storms of the North Atlantic and very frequently to the attacks of the English. Indeed, although the colonial policy of France under the old *régime* aimed at preventing the manufacture in Canada of any article which could be imported from the mother country, the uncertainties of transportation due to the colonial wars of the period—France and England were at war for 34 years out

of the 74 years between 1689 and 1763—led to a necessary relaxation of restrictions. On the occasion of the English capture of a convoy in 1705, the colonists were driven to manufacture rough cloth out of whatever fibres they could obtain, such as the Canadian nettle and the inner bark of the basswood. Such events led to the introduction of sheep-raising and the manufacture of homespun woollens. The number of sheep in the colony increased from 1,820 in 1706 to 12,175 in 1720, 28,022 in 1765, 84,696 in 1784 and 829,122 in Lower Canada alone in 1827. This increase in sheep approximately measures the growth of the manufacture of homespun woollens, while in 1827, according to census records, there were in Lower Canada 13,243 spinning-wheels, and 1,153,673 French ells of home-made cloth, 808,240 French ells of home-made flannel, and 1,058,696 French ells of home-made linen were produced. In 1842 Upper Canada produced 433,527 yards of home-made cloth, 166,881 yards of home-made linen and 727,286 yards of home-made flannel, and in 1848, 624,971 yards of fulled cloth, 71,715 yards linen and 1,298,172 yards flannel. Nova Scotia in 1851 produced 119,698 yards fulled cloth, 790,104 yards non-fulled cloth, and 219,352 yards flannel. Such production of homespun goods did not materially interfere with the market for the more elaborate factory-made goods imported from the United Kingdom, but supplied the numerous daughters in the large families of the pioneers with useful work in their own homes.

In the days when ships were built of wood, a country where wood was so plentiful as in Canada possessed the raw materials for production. Pont-Gravé built two small vessels at Port Royal in 1606 and one at Tadoussac in 1608. Talon in 1666 built on his private account a ship of 120 tons, and in 1672 a vessel of 400 to 500 tons was on the stocks at Quebec. Ships were built for the French navy and for the West India trade. Under the British *régime* shipbuilding was conducted on a large scale in Quebec and New Brunswick, the industry reaching its climax of prosperity about 1865, when 105 Quebec-built ships with a tonnage of 59,333 tons were placed on the register. Thereafter iron and steel ships gradually supplanted the wooden vessels, but the forests of Canada have since provided the raw material for the great pulp and paper industry.

The development of mines has been of comparatively recent date. Iron deposits in the St. Maurice region were worked as early as 1733 and furnaces set up there for smelting in 1737 were in fairly constant operation until 1883. The iron and steel used in manufacturing in Canada, as well as the coal which has supplied the manufacturing industries with power, has in the main been imported from the United States, chiefly because the principal manufacturing centres of the country in the St. Lawrence and Great Lakes region were fairly conveniently situated with regard to the coal and iron supplies of the United States, and far away from the coal and iron supplies of the Maritime Provinces. In recent years the shortage of coal is made up for by the increasing use of electric power, and the great bulk of the pig-iron used in Canadian manufactures is now made in domestic blast-furnaces.

The Introduction of the Factory System.—In Canada, as in the United States and in Great Britain, it was inevitable that manufactures, carried on in the household or in small adjoining work shops, should be supplanted in the leading industries of the country by manufactures carried on in factories. A factory has been defined as “an establishment where several workmen are collected for the purpose of obtaining greater and cheaper conveniences for labour than they could procure individually at their homes, for producing results by their combined efforts which they could not accomplish separately, and for preventing the loss occasioned by carrying articles from place to place during several processes necessary to complete their manufacture.” Such factories began to exist in Canada in the sixties and the

seventies of the last century and have since that time become the dominant factor in Canadian manufacturing industry.

Encouragement of Manufactures by Protective Tariff.¹—In all new and developing countries, producing food products and raw materials in abundance, there comes to be at a certain stage a movement for working up these commodities within the country rather than exporting them in the raw state. Thus, a movement to promote a rise of manufacturing industries in Canada took place in the fifties of the last century, and in 1858 the Canadian Legislature enacted a protective tariff against which English exporters to Canada of manufactured goods vehemently protested. Canada, however, claimed the right to raise her revenue in the manner which suited herself and Great Britain did not contest the point. From that day to this, there has been an element of protection in Canadian tariff legislation. For a considerable time the protection afforded to Canadian manufacturers was described as "incidental protection" and after Confederation the tariff was reduced in deference to the low tariff sentiment prevailing in the Maritime Provinces, which were commercial rather than manufacturing communities. However, after a commercial depression which took place in the 1870's the people of Canada, at the general election of 1878, voted in favour of a higher tariff.

The policy of protection was definitely adopted in 1879, when the manufacturer was given an increase in the duty on his finished product, offset in some cases, it is true, by higher duties on his raw materials. In sugar and molasses there were some twelve tariff items, seven bearing a compound duty, the average *ad valorem* duty imposed being 26·25 p.c. On the lines of cotton goods likely to be manufactured in Canada, duties were raised from 17½ p.c. to rates, specific and *ad valorem*, equivalent on the importations of 1881 to 30 p.c. The duties on woollens, which were all in the 17½ p.c. schedule in 1878, were practically doubled. On some of the 36 iron and steel articles enumerated in the schedule the duties were specific, on some compound, but on the whole, there was an average duty of 16·17 p.c. Pig iron, previously free, was made to pay \$2 a ton. The duty on iron billets, bars and rods was increased from 5 p.c. to 10 p.c. and 17½ p.c., while manufactured iron and steel products and machinery were given 25 p.c. to 35 p.c. protection. On coal, both bituminous and anthracite, a duty of 50 cents a ton was imposed. The average *ad valorem* rate of duty on the dutiable imports in 1880 was 26·1 p.c., as compared with 21·4 p.c. in 1878. The maximum percentage was reached in 1889, when the rate was 31·9 p.c. By 1896 there was a slight drop in the rate to 30·0 p.c., and the declining trend continued until 1918 and 1919, when a rate of 21·5 p.c. was recorded. In 1924 the rate was 22·9 p.c.

Growth of Canadian Manufactures Prior to the War.—Until the later nineties the growth of Canadian manufacturing industry was not particularly rapid, though the great fall in the prices of commodities during the period from 1873 to 1897 was largely responsible for the comparatively slow growth of the values of manufactured commodities from \$221,600,000 in 1870 to \$469,800,000 in 1890. Afterwards there was a change; the prices of commodities commenced to rise, while the industries generally shared in the advantages of the great growing period from 1900 to 1912. The gross product of establishments with five hands or over increased from \$368,700,000 in 1890 to \$1,166,000,000 in 1910, and to \$1,381,500,000 in 1915. The fundamental advantages of the position of Canada, her abundant raw material, her inexhaustible water power, her growing home market in the expanding West, had contributed to this result.

¹On this subject, see also the commencement of the section on External Trade.

In the present as in the past, Canadian manufacturing production has been chiefly dependent upon the use of Canadian raw material, though this is less true than formerly. Raw cotton, for example, is imported from the Southern States, hides from the Argentine, rubber from the Straits Settlements and Malay Peninsula, sugar from Cuba and the British West Indies, and wool from Australia and New Zealand, to supply the raw material for Canadian manufacturing industries.

The Influence of the War.—The influence of the war upon the manufactures of Canada was profound and far-reaching, tending to promote the diversification of product and the production at home of many commodities which had previously been imported. On account of the practical suspension of the importation of manufactured goods of many kinds from Europe, enterprising Canadian manufacturers were given opportunities of entering upon new lines of manufacture with practical control of the market. There was added to this the reflex effect of the great prosperity of agriculture, produced by the unprecedented prices of war-time. The farmers of Canada bought as never before. The general result was that industry worked at high pressure, not only to produce the munitions and military supplies for the armies of the Allies, but also to make the manifold varieties of goods required for the stimulated civilian consumption. The world shortage of staple commodities, coupled with a strong domestic demand, gave the Canadian industries in general a pronounced stimulus toward greater production, and in a great number of cases the capacity of manufacturing plants was increased; this increase created a demand for greater supplies of raw material. Incidentally, factory methods became more specialized and a high degree of administrative and mechanical efficiency was attained, while Canada, partly owing to the industrial inactivity of Europe, assumed a new position as one of the leading manufacturing countries of the world.

The great boom in Canadian manufactures described above reached its height in the summer of 1920, the statistics for that year showing greatest gross and net value of products. The statistics for the year 1921, published in Table 1, show a great decline in values, which does not mean a corresponding decline in physical quantity of production, though here a certain decline undoubtedly took place. There was also some decline in 1922; 1923, the statistics for which are not yet available, was a rather better year for employment in manufactures than 1922, while 1924 has fallen off somewhat as compared with 1923. It would appear, speaking generally, that the country is recovering from the great depression of 1921, and that the rather low statistics for that year and for 1922 were not more representative of normal conditions in Canadian manufacturing industries than were the extremely high figures of 1920. During the early months of 1924 the general outlook was good, but the expectations of greater activity were not fulfilled during the second and third quarters. Later developments, including the rise in the prices of basic commodities and the improved prospects of Central Europe, have contributed to a more confident tone.

2.—Statistics of Manufactures.

1.—Historical Statistics since 1871.

The growth of large-scale production in manufactures during the past fifty years is evident from the statistics of Table 1 (though this tendency has been less marked in Canada than in more highly developed industrial communities, with larger populations able to absorb a larger amount of standardized commodities). Even so, in the electoral district of South Toronto, the most important manufacturing centre of Ontario, the census of 1911 showed that one-half of the industrial establishments

employed 90 p.c. of the workers. In the period immediately preceding the Great War many consolidations of previously independent manufacturing plants were effected, involving large economies in the purchase of materials and in selling expenses.

The historical Table 1 shows fairly well the advance of the "Industrial Revolution" (which might better be called "Evolution") in Canada. The average capital per manufacturing establishment, the average number of employees per establishment, and the average value of product per establishment, have been in trend continuously on the increase. If the consolidation of industry lessens the chances of an employee becoming a master, it must also be remembered that the amounts paid to employees in salaries and wages have also increased, so that the position of the average employee has been greatly ameliorated, though the lack of statistics on Canadian prices before 1890 prevents us from comparing the purchasing power of the average wages of the worker of 1870 and of the employee of the present.

The Censuses of Manufactures.—The comparability of the statistics of the various censuses is seriously affected by the different methods employed in census-taking. In the censuses of 1870, 1880 and 1890, all manufacturing establishments were included, the instructions to enumerators running as follows:—"An industrial establishment is a place where one or several persons are employed, in manufacturing, altering, making up or changing from one shape into another, materials for sale, use or consumption, quite irrespectively of the amount of capital employed or of the products turned out. All repairs, mending or custom work are understood to be industrial products and are to be entered accordingly, by value, in the returns of industrial establishments."

In the statistics of 1900, 1905, and 1910, however, only establishments employing five hands and upwards were included. The 1901 instructions are that no manufacturing establishment or factory will be so recognized for census purposes which does not employ at least five persons, either in the establishment itself or as piece-workers employed out of it. This, however, did not apply to cheese and butter factories nor to certain mineral products. The 1911 instructions stated that every factory in operation during the whole or part of 1910, and employing five or more persons, was to make a full report. All flour mills, saw and shingle mills, lime kilns, brick and tile works, butter and cheese factories, fish-curing plants, electric light and power plants whatsoever were nevertheless to be included. The statistics for 1915 included only establishments having an output of \$2,500 or over, irrespective of the number of persons employed, except in the case of flour and grist mills, butter and cheese factories, fish-preserving factories, saw-mills, brick and tile yards, lime kilns and electric light plants, where all plants were included.

Under the Statistics Act of 1918, the policy of including mines, fisheries, manufactures and other industrial production in the decennial census was abandoned and an annual "census of industry" substituted therefor. (See first annual report of the Dominion Statistician, pp. 30-36).

In the census of industry for 1917, the limit of output was withdrawn and all establishments reporting to the Bureau were included, the effect being an increase in the number of establishments included from 21,306 in 1915 to 34,392 in 1917—an increase due mainly to change of method, rather than to a change in the actual number of industrial establishments existing in the Dominion. In the taking of an annual canvass of the wide scope of the Canadian industrial census, it is inevitable that changes in the number of reporting industries shall be made from time to time, interfering with the comparability of the results. The statistics in regard to a large number of the custom and repair industries for 1922 were not collected,

resulting in the dropping from the compilation of the entire group of "construction, hand trades and repairs." Several custom and repair industries, such as the custom clothing industry previously included in the textile group, were eliminated from the totals for 1922. The result is that direct comparability of the statistics of 1922 with the figures of previous years was impaired. In the majority of cases in the present article special tables have been prepared for the period from 1917 to 1921, by deducting the statistics of the industries which have been entirely eliminated from the tables for 1922. In view of the large number of small establishments in the hand trade industries, the greatest divergency between the results of 1922 and of past years as previously published, is in the number of establishments.

Censuses of Manufactures in Recent Years.—The census of manufactures has since 1917 been taken annually by the Dominion Bureau of Statistics instead of quinquennially as theretofore. The last of the quinquennial censuses was taken in 1916 for the calendar year 1915, and the first annual censuses were taken in the years from 1918 to 1923 for the years 1917 to 1922.

In any comparison between the results of the 1915 quinquennial census and the subsequent annual censuses the rapid rise in prices must be borne in mind, and in comparisons between these annual censuses themselves the same factor must be taken into account. Thus, the new Canadian index number of wholesale prices compiled by the Dominion Bureau of Statistics was 248·2 in 1920 as compared with 213·2 in 1919, 207·8 in 1918, 174·6 in 1917, and 115·6 in 1915. In 1921, however, there was a great decline to 177·3 on the average of the year—a decline of approximately 28·6 p.c. from the preceding year. Under such circumstances it was inevitable that up to 1920 phenomenal advances in the money value of manufactured products should have been recorded, and that wages and salaries paid should also have greatly advanced since 1915. It was equally inevitable that in all these respects 1921 should show a great decline, due in much larger measure to the fall in values than to the decrease in physical production. In 1922 the index number showed a further decline to 152·0—a drop of 11·5 p.c. from 1921 prices. This would indicate that the comparatively small decline in the gross production of manufactured goods in 1922 is entirely due to declining values.

In Table 1 are presented statistics showing by provinces the development of Canadian manufacturing industries during the half-century from 1870 to 1922. Particularly notable is the increase in the manufactures of British Columbia from \$2,900,000 in 1880 to \$149,000,000 in 1922, and of Manitoba from \$3,400,000 in 1880 to \$94,400,000 in 1922. Saskatchewan also shows an increase from \$2,400,000 in 1905 to \$38,700,000 in 1922 and Alberta from \$5,000,000 in 1905 to \$51,500,000 in 1922. Thus the West is rapidly becoming an important contributor to Canadian manufacturing production. The tables relating to years 1917 to 1921 were adjusted to establish comparability with the results for 1922, which are exclusive of the construction industry and the hand trades. The statistics of manufactures from 1917 to 1922, classified by groups on a comparable basis, are presented in Table 2.

The statistics of manufactures for Canada and the provinces for the years 1917 to 1922 in the present edition of the Year Book are strictly comparable, but do not include the data for certain non-metallic mineral industries such as cement, brick and tile, clay sewer-pipe, firebrick and fireclay, stoneware and pottery, lime-burning and salt. It is the intention in future editions of the Year Book to include these industries in the Manufactures section, as well as dealing with their production in the Mines and Minerals section. Details regarding these industries, with special emphasis placed upon production, may be found on page 369 of the present volume.

1.—Historical Summary of Statistics of Manufactures, by Provinces, 1870-1922.

(All establishments irrespective of the number of employees.)

Provinces.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Net value of products.	Gross value of products.
1870.	No.	\$	No.	\$	\$	\$	\$
Canada	41,259	77,964,020	187,942	40,851,609	124,907,846	96,709,927	221,617,773
Nova Scotia.....	4,912	2,041,966	15,595	3,176,266	5,806,257	6,531,848	12,338,105
New Brunswick.....	3,479	5,976,176	18,352	3,869,360	9,431,760	7,935,927	17,367,687
Quebec.....	13,818	28,071,868	66,714	12,389,673	44,555,025	32,650,157	77,205,182
Ontario.....	19,050	37,874,010	87,281	21,415,710	65,114,804	49,591,995	114,706,799
1880.							
Canada	49,722	165,302,623	254,935	59,429,002	179,918,593	129,757,475	309,676,068
P. E. Island.....	1,617	2,085,776	5,767	807,208	1,829,210	1,570,998	3,400,208
Nova Scotia.....	5,493	10,183,060	20,390	4,098,445	10,022,030	8,553,292	18,575,326
New Brunswick.....	3,005	8,425,282	19,922	3,866,011	11,060,842	7,451,816	18,512,658
Quebec.....	15,754	59,216,992	85,673	18,333,162	62,563,967	42,098,291	104,662,258
Ontario.....	23,070	50,950,847	118,308	30,604,031	91,164,156	66,825,714	157,989,870
Manitoba.....	344	1,383,331	1,921	755,507	1,924,821	1,488,205	3,413,026
British Columbia.....	415	2,952,835	2,871	929,213	1,273,816	1,652,968	2,926,784
The Territories.....	24	104,500	83	35,425	79,751	116,187	195,938
1890.							
Canada	75,964	353,213,000	369,595	100,415,350	250,759,292	219,088,594	469,847,886
P. E. Island.....	2,679	2,911,963	7,910	1,101,620	2,092,067	2,253,843	4,345,910
Nova Scotia.....	10,495	19,730,736	34,944	7,233,111	16,062,479	14,905,913	30,968,392
New Brunswick.....	5,429	15,821,855	26,675	5,970,914	12,501,453	11,348,202	23,849,655
Quebec.....	23,034	116,974,615	116,753	30,461,315	80,712,496	66,747,087	147,459,583
Ontario.....	32,151	175,972,021	166,322	49,730,359	127,737,371	111,504,555	239,241,926
Manitoba.....	1,031	5,684,237	4,403	1,905,981	5,688,151	4,467,031	10,155,182
British Columbia.....	770	14,404,394	11,507	3,586,897	5,119,258	6,880,670	11,999,923
The Territories.....	375	1,713,179	1,081	425,153	846,017	981,293	1,827,310
1890.		(Establishments with five hands and over.)					
Canada	14,065	-	272,033	79,234,311	-	-	368,696,723
1900.							
Canada	14,650	446,916,487	339,173	113,249,350	266,527,858	214,525,517	481,053,375
P. E. Island.....	334	2,081,766	3,804	445,998	1,310,058	1,007,650	2,326,708
Nova Scotia.....	1,188	34,586,416	23,284	5,613,571	13,161,077	10,431,426	23,592,513
New Brunswick.....	919	20,741,170	22,158	5,748,990	10,814,014	10,158,456	20,972,470
Quebec.....	4,845	142,403,407	110,329	36,550,655	86,679,779	71,608,215	158,287,904
Ontario.....	6,543	214,972,275	161,757	56,548,286	138,230,400	103,303,036	241,533,436
Manitoba.....	324	7,539,691	5,219	2,419,549	7,955,504	4,971,935	12,927,439
Alberta and Saskatchewan.....	105	1,689,870	1,168	465,763	1,121,342	843,645	1,964,987
British Columbia.....	392	22,901,892	11,454	5,456,538	7,246,684	12,201,094	19,447,778
1905.							
Canada	12,547	833,916,155	383,920	162,155,578	-	-	706,446,578
P. E. Island.....	223	1,553,916	2,770	409,915	-	-	1,696,459
Nova Scotia.....	720	74,599,538	23,754	9,139,371	-	-	31,987,449
New Brunswick.....	531	26,461,664	19,170	6,497,161	-	-	21,833,564
Quebec.....	4,115	251,730,182	116,748	46,514,619	-	-	216,478,496
Ontario.....	6,163	390,875,465	184,526	80,729,889	-	-	361,372,741
Manitoba.....	280	27,070,665	10,113	5,800,707	-	-	27,857,396
Saskatchewan.....	55	3,820,975	1,376	681,381	-	-	2,443,801
Alberta.....	97	5,400,371	1,983	1,129,272	-	-	4,979,932
British Columbia.....	363	52,403,379	23,480	11,253,263	-	-	37,796,740
1910.							
Canada	19,218	1,247,583,609	515,203	241,098,416	601,509,018	561,466,621	1,165,975,639
P. E. Island.....	442	2,013,365	3,762	531,017	1,816,804	1,319,666	3,136,470
Nova Scotia.....	1,480	79,596,341	28,795	10,628,955	26,058,315	26,647,869	52,706,184
New Brunswick.....	1,158	36,125,012	24,755	8,314,212	18,516,096	16,906,206	35,422,302
Quebec.....	6,584	326,946,925	158,207	69,432,967	184,374,053	166,527,603	350,901,656
Ontario.....	8,001	595,394,608	238,817	117,645,784	297,580,125	282,230,100	579,810,225
Manitoba.....	439	47,841,540	17,325	10,912,866	30,499,829	23,173,780	53,673,609
Saskatchewan.....	173	7,019,951	3,250	1,936,284	2,747,266	3,584,866	6,332,132
Alberta.....	290	29,518,346	6,980	4,365,661	9,998,777	8,790,048	18,788,825
British Columbia.....	651	123,027,521	33,312	17,240,670	29,917,753	35,286,483	65,204,236
1915.							
Canada	15,993	1,958,705,230	-	283,311,505	791,943,433	589,603,792	1,381,547,225
P. E. Island.....	261	1,841,690	-	543,954	1,499,066	1,087,757	2,586,823
Nova Scotia.....	781	125,754,562	-	17,175,818	36,194,004	33,151,815	69,345,819
New Brunswick.....	630	45,970,488	-	8,767,230	21,314,643	15,989,257	37,303,900
Quebec.....	5,743	530,312,464	-	80,324,171	213,754,115	167,449,884	381,203,999
Ontario.....	6,538	946,619,114	-	140,609,691	410,670,537	304,861,302	715,531,839
Manitoba.....	499	94,690,750	-	13,389,569	38,529,386	21,952,060	60,481,446
Saskatchewan.....	238	14,736,860	-	2,440,062	7,417,166	5,938,040	13,355,206
Alberta.....	282	41,198,897	-	4,791,281	20,699,967	8,716,254	29,416,221
British Columbia.....	621	157,580,405	-	15,269,729	41,864,549	30,457,423	72,321,972

¹These statistics are not available by provinces.

NOTE.—For 1915 the number of employees in establishments employing 5 hands and over has not been compiled.

1.—Historical Summary of Statistics of Manufactures, by Provinces, 1870-1922—con.
(All establishments irrespective of the number of employees.)

Provinces.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Net value of products.	Gross value of products.
1917.	No.	\$	No.	\$	\$	\$	\$
Canada.	22,403	2,575,171,964	598,379	484,639,519	1,522,654,992	1,283,150,374	2,805,500,366
P.E. Island.	416	2,205,871	1,576	678,134	3,088,718	1,804,642	4,893,360
Nova Scotia.	1,344	124,938,146	24,564	18,363,919	101,321,237	56,883,119	158,204,356
New Brunswick.	970	63,510,881	19,986	13,024,868	32,407,190	27,618,061	60,025,251
Quebec.	7,138	746,889,147	183,189	133,117,326	381,934,380	376,673,567	758,607,947
Ontario.	9,215	1,253,093,990	298,036	255,795,838	786,746,140	667,653,344	1,454,399,484
Manitoba.	801	87,198,197	19,431	16,753,258	68,997,949	43,402,618	112,400,867
Saskatchewan.	629	29,617,911	6,797	5,868,896	22,093,445	15,424,810	37,518,255
Alberta.	706	57,597,815	9,924	9,065,530	42,725,021	25,729,490	68,454,611
British Columbia.	1,173	206,380,977	34,805	31,852,949	83,309,509	67,623,937	150,933,446
Yukon.	11	3,739,169	71	118,801	26,403	336,786	363,189
1918.	22,470	2,794,061,722	586,002	544,158,418	1,790,254,315	1,384,010,372	3,174,264,687
P.E. Island.	389	2,590,689	1,263	667,575	3,354,829	1,732,051	5,086,880
Nova Scotia.	1,297	120,730,735	21,721	18,469,613	87,302,906	53,744,592	141,407,498
New Brunswick.	891	72,325,478	17,958	12,889,400	32,824,422	31,497,760	64,204,182
Quebec.	7,303	785,088,622	178,941	148,793,381	441,035,960	391,527,554	832,565,514
Ontario.	9,454	1,409,276,240	297,716	290,457,663	962,711,402	734,997,784	1,697,709,186
Manitoba.	769	88,042,555	19,554	18,870,128	87,336,081	43,020,428	130,359,509
Saskatchewan.	570	34,425,055	6,272	6,643,641	28,391,878	15,759,894	44,151,772
Alberta.	622	53,829,089	8,041	8,389,605	52,892,720	23,449,316	76,242,135
British Columbia.	1,161	224,122,480	34,477	38,874,863	94,883,283	68,162,446	182,545,629
Yukon.	14	3,633,729	59	102,909	20,534	236,548	257,882
1919.	22,899	2,932,916,880	578,733	578,789,251	1,739,850,116	1,430,992,372	3,170,842,586
P.E. Island.	401	2,444,485	1,292	787,407	4,005,474	2,221,124	6,226,588
Nova Scotia.	1,345	117,476,930	19,826	16,986,360	68,721,453	51,009,176	119,730,629
New Brunswick.	926	87,181,889	21,888	17,364,494	51,362,722	43,058,144	94,420,866
Quebec.	7,512	841,457,337	177,103	160,022,502	484,024,494	416,118,197	900,542,691
Ontario.	9,424	1,451,909,847	281,935	293,094,531	883,269,594	706,852,142	1,590,101,736
Manitoba.	764	93,476,895	21,378	23,717,365	82,881,981	48,658,384	131,540,365
Saskatchewan.	620	28,895,414	7,154	8,710,005	32,167,014	18,866,439	51,033,453
Alberta.	654	58,181,025	10,503	12,498,793	52,880,167	33,469,841	86,350,008
British Columbia.	1,242	248,341,007	37,621	45,548,740	80,520,791	110,203,763	190,724,554
Yukon.	11	3,562,048	33	59,064	16,426	155,260	171,686
1920.	22,942	3,208,613,715	583,112	695,216,542	2,057,415,181	1,609,765,194	3,667,180,375
P.E. Island.	383	2,693,219	1,301	869,249	4,143,029	2,201,634	6,344,663
Nova Scotia.	1,335	127,081,128	21,066	22,812,718	82,773,344	56,112,197	138,885,541
New Brunswick.	916	105,334,372	19,012	19,271,393	60,803,649	46,433,099	107,236,748
Quebec.	7,630	967,058,205	177,373	192,687,275	544,651,879	487,793,415	1,032,445,294
Ontario.	9,251	1,611,192,528	292,288	358,703,895	1,064,847,183	798,661,592	1,863,508,775
Manitoba.	757	104,219,157	23,399	31,826,418	90,923,943	62,112,242	153,036,185
Saskatchewan.	631	30,601,085	6,988	10,056,427	34,894,105	24,184,051	59,078,186
Alberta.	704	53,013,906	10,823	14,950,058	56,139,646	30,400,618	86,540,264
British Columbia.	1,330	206,051,908	30,843	44,007,938	118,238,403	101,774,010	220,012,413
Yukon.	5	1,368,207	19	31,171	-	92,306	92,306
1921.	21,872	3,052,818,103	439,889	498,430,750	1,354,936,239	1,162,041,572	2,516,977,811
P.E. Island.	339	2,308,216	893	522,488	2,516,415	1,356,940	3,873,355
Nova Scotia.	1,186	95,874,749	12,890	12,359,197	39,893,815	32,943,481	72,837,296
New Brunswick.	855	88,856,564	12,252	10,581,025	32,150,028	22,904,387	55,054,415
Quebec.	7,126	927,111,817	141,459	144,432,402	385,193,845	346,191,463	731,385,308
Ontario.	9,112	1,561,196,925	222,996	266,671,928	701,724,311	605,557,486	1,307,281,797
Manitoba.	759	97,493,856	14,032	19,063,719	59,546,394	43,510,718	103,057,112
Saskatchewan.	592	29,271,567	4,176	5,579,114	25,589,403	14,925,203	40,514,706
Alberta.	689	50,306,658	7,594	9,406,256	33,912,502	24,658,303	58,570,805
British Columbia.	1,205	199,032,425	23,512	29,803,235	74,396,166	69,847,427	144,243,593
Yukon.	9	1,360,336	35	61,386	13,360	146,064	159,424
1922.	22,184	3,125,772,761	462,573	497,113,554	1,280,527,079	1,159,316,687	2,439,843,766
P.E. Island.	351	2,935,829	1,119	625,200	2,621,441	1,783,594	4,405,037
Nova Scotia.	1,140	97,799,273	13,580	11,569,823	37,828,238	28,713,454	66,541,692
New Brunswick.	855	81,789,934	14,199	12,080,840	38,058,622	26,555,515	64,614,137
Quebec.	7,367	932,186,153	144,949	141,002,237	337,168,035	358,975,190	696,143,225
Ontario.	9,174	1,643,187,941	237,319	268,662,730	676,725,112	597,699,690	1,274,424,802
Manitoba.	768	84,662,378	13,789	17,891,004	54,619,248	39,798,360	94,417,608
Saskatchewan.	606	30,268,144	4,126	5,562,145	22,450,051	16,222,777	38,672,828
Alberta.	652	51,283,982	7,001	8,949,905	30,306,395	21,203,492	51,509,887
British Columbia.	1,238	200,192,904	26,481	30,740,778	80,749,933	68,246,533	145,996,468
Yukon.	3	1,466,223	10	28,832	-	118,082	118,082

¹Statistics of the construction and custom and repair industries were not collected for 1922; the figures for these industries for 1917 to 1921 have consequently been deducted from the totals as previously published. The industries excluded comprise custom clothing, dyeing and laundry work, boot, jewelry, automobile and bicycle repairing, blacksmithing, cement, brick and tile, clay sewer-pipe, stoneware and pottery, lime-burning and salt.

2.—Summary of Statistics of Manufactures, by Industrial Groups, 1917-1922.¹

(All establishments irrespective of the number of employees.)

Industrial Groups.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Net value of products.	Gross value of products.
	No.	\$	No.	\$	\$	\$	\$
1917.							
Total	22,403	2,575,171,964	598,379	484,639,519	1,522,649,992	1,283,150,374	2,805,800,366
Vegetable products.	3,816	274,722,765	61,288	44,780,329	365,483,923	181,072,143	546,556,066
Animal products....	5,486	207,165,245	46,994	35,753,133	320,302,039	124,103,990	444,406,029
Textile products....	1,360	196,823,197	82,639	51,189,060	132,479,763	115,739,096	248,218,859
Wood and paper....	7,255	537,731,225	153,751	115,137,384	149,927,482	248,986,564	398,914,046
Iron and its prod- ucts.....	1,404	634,642,989	142,416	140,334,255	357,688,333	334,616,810	692,305,143
Non-ferrous metals.	296	69,421,911	18,220	15,898,890	46,445,469	41,039,351	87,484,820
Non-metallic min- erals.....	1,063	88,336,215	16,626	14,217,873	38,724,530	44,938,223	83,662,753
Chemicals and allied products...	539	175,836,690	56,153	51,505,484	99,068,092	131,381,995	230,450,087
Miscellaneous in- dustries.....	1,184	390,491,727	20,292	15,823,111	12,530,361	61,272,202	73,802,563
1918.							
Total	22,470	2,794,064,722	586,002	544,158,418	1,790,254,315	1,384,010,372	3,174,264,687
Vegetable products.	3,824	310,556,340	63,197	49,788,771	409,813,120	188,009,655	597,822,775
Animal products....	5,493	225,949,731	51,085	40,970,545	348,773,348	131,220,539	479,993,887
Textile products....	1,394	232,678,413	82,144	54,754,968	182,529,695	137,903,308	320,433,003
Wood and paper....	7,281	599,594,273	150,732	130,348,989	168,154,574	282,110,061	450,264,635
Iron and its prod- ucts.....	1,397	631,390,223	127,246	148,361,634	393,204,670	330,388,308	723,592,978
Non-ferrous metals.	286	78,075,726	17,741	17,635,814	40,988,990	38,406,413	79,395,403
Non-metallic min- erals.....	940	113,209,440	15,811	15,404,546	53,171,648	42,416,310	95,587,958
Chemicals and allied products...	534	162,912,627	56,391	66,741,341	178,227,423	157,923,196	336,150,619
Miscellaneous in- dustries.....	1,321	439,697,949	21,655	20,151,810	15,390,847	75,632,582	91,023,429
1919.							
Total	22,899	2,932,916,880	578,733	578,789,251	1,739,850,116	1,430,992,470	3,170,842,586
Vegetable products.	3,964	336,730,861	69,780	62,545,616	497,887,117	199,785,015	697,672,132
Animal products....	5,433	242,003,094	54,372	50,709,455	401,105,903	142,322,561	543,428,464
Textile products....	1,524	257,860,265	87,275	69,661,851	213,282,721	163,841,996	377,124,717
Wood and paper....	7,623	707,052,570	166,176	157,240,646	215,115,868	359,322,951	574,438,819
Iron and its prod- ucts.....	1,523	611,291,790	129,157	162,103,816	249,399,965	348,540,736	597,940,701
Non-ferrous metals.	311	80,288,911	17,108	18,338,421	33,393,739	38,113,823	71,507,562
Non-metallic min- erals.....	794	129,932,028	16,852	18,848,082	62,610,856	44,359,214	106,970,070
Chemicals and allied products...	406	106,110,959	14,719	15,255,350	45,399,060	49,168,100	94,567,160
Miscellaneous in- dustries.....	1,321	461,646,402	23,294	24,086,014	21,654,887	85,538,074	107,192,961
1920.							
Total	22,942	3,208,613,715	583,112	695,216,542	2,057,415,181	1,609,765,194	3,667,180,375
Vegetable products.	4,219	394,123,233	72,380	75,695,530	532,484,195	234,317,527	766,801,722
Animal products....	4,823	221,792,457	48,687	54,291,606	400,496,354	152,995,130	553,491,484
Textile products....	1,304	302,758,185	87,730	84,433,609	256,233,300	173,741,035	429,974,335
Wood and paper....	7,867	772,086,812	143,731	171,610,460	308,282,232	415,784,276	724,066,508
Iron and its prod- ucts.....	1,690	642,904,322	146,204	205,414,599	349,642,666	365,473,097	715,115,763
Non-ferrous metals.	324	109,382,033	23,162	27,895,343	48,434,120	52,847,178	101,281,298
Non-metallic min- erals.....	866	143,681,810	18,770	23,683,692	74,200,407	54,405,062	128,605,469
Chemicals and allied products...	464	122,123,730	17,653	22,193,421	62,644,608	65,183,212	127,827,820
Miscellaneous in- dustries.....	1,386	499,761,133	24,795	29,998,282	24,997,299	95,018,677	120,015,976

¹ See note to Table 1.

2.—Summary of Statistics of Manufactures, by Industrial Groups, 1917-1922¹—concluded.

(All establishments irrespective of the number of employees.)

Industrial Groups.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Net value of products.	Gross value of products.
1921.	No.	\$	No.	\$	\$	\$	\$
Total	21,872	3,052,818,103	439,889	498,430,750	1,354,936,239	1,162,041,572	2,516,977,811
Vegetable products.	3,946	360,945,194	61,161	63,130,893	364,123,395	205,448,326	569,571,721
Animal products...	5,051	200,697,527	45,726	48,124,667	267,878,165	111,534,101	379,412,266
Textile products....	1,627	260,158,327	76,379	71,321,283	164,139,109	140,773,447	304,912,556
Wood and paper....	7,152	775,207,859	111,322	131,089,861	203,856,170	283,260,565	487,116,735
Iron and its pro- ducts.....	1,138	575,680,424	77,080	98,363,983	194,725,179	187,672,905	382,398,084
Non-ferrous metals.	344	104,079,490	17,936	22,692,784	31,439,989	41,149,894	72,589,883
Non-metallic min- erals.....	764	126,989,134	15,982	19,801,091	67,780,080	47,776,911	115,556,991
Chemicals and al- lied products....	468	118,382,642	12,571	16,192,457	43,108,870	45,495,135	88,604,005
Miscellaneous in- dustries.....	1,382	530,677,506	21,732	27,713,731	17,885,282	98,930,288	116,815,570
Total	22,184	3,125,772,761	462,573	497,113,554	1,280,527,079	1,159,316,687	2,439,843,766
Vegetable products	4,355	371,361,682	63,217	64,424,922	330,589,052	206,946,749	537,535,801
Animal products...	5,118	201,829,414	49,595	49,933,679	264,078,631	107,473,382	371,552,013
Textile products....	1,709	268,065,238	88,048	76,224,361	153,066,593	155,493,510	308,560,103
Wood and paper....	6,983	761,188,396	118,462	132,084,914	206,682,870	285,131,962	489,814,782
Iron and its pro- ducts.....	1,040	526,109,953	74,588	90,605,157	168,282,265	163,302,638	331,584,903
Non-ferrous metals.	325	102,208,275	18,222	21,451,629	30,861,895	39,993,798	70,855,693
Non-metallic min- erals.....	781	161,063,081	14,588	18,724,780	63,377,262	46,260,192	109,637,454
Chemicals and al- lied products....	469	118,025,483	14,082	16,770,503	47,039,926	48,904,259	95,944,185
Miscellaneous in- dustries.....	1,404	615,921,239	21,771	26,893,609	16,548,635	107,810,197	124,358,832

¹See note to Table 1.

2.—Summary of Recent Manufacturing Statistics.

[For the scheme of reports issued annually on the manufacturing industries by the Dominion Bureau of Statistics, the reader is referred to the sub-section "The Dominion Bureau of Statistics," in the present volume, dealing with the organization of the Bureau and its publications.]

The statistics of manufactures relating to 1917 and later years, as presented in the present edition, have been revised where necessary to establish comparability. According to the census of 1922, there were in Canada 22,184 manufacturing establishments distributed throughout the nine provinces and Yukon Territory. The total number of employees was 462,573, the amount of capital invested \$3,125,772,761, and the output was valued at \$2,439,843,766. As compared with the revised statistics of 1917 there was a decrease of 22.7 p.c. in the number of employees, an increase of over 21 p.c. in the amount of capital invested and a decrease of over 13 p.c. in the value of products.

Statistics for recent years.—In Table 3 are given summary statistics of the manufactures of Canada for the three years 1920 to 1922 inclusive.

3.—Summary Statistics of Manufactures of Canada, 1920-1922.

(All establishments irrespective of the number of employees.)

Items.	1920.	1921.	Increase (+) or decrease (-) p.c., 1920-21.	1922.	Increase (+) or decrease (-) p.c., 1921-22.
Establishments.....No.	22,942	21,872	- 30	22,184	+ 1.42
Capital..... \$	3,208,613,715	3,052,818,103	- 4.85	3,125,772,761	+ 2.39
Average capital per estab- lishment..... \$	139,858	139,577	- .20	140,902	+ .95
Employees on salaries.....No.	80,485	73,195	- 9.06	74,884	+ 2.31
Salaries..... \$	143,206,399	133,154,604	- 7.02	133,850,436	+ .52
Average salary..... \$	1,779	1,819	+ 2.25	1,787	- 1.76
Employees on wages.....No.	502,627	366,694	- 27.05	387,689	+ 5.72
Wages..... \$	552,010,143	365,276,146	- 33.83	363,263,118	- .55
Average wage..... \$	1,098	996	- 8.38	937	- 6.00
Cost of materials..... \$	2,057,415,181	1,354,936,239	- 34.14	1,280,527,079	- 5.49
Average cost of materials per establishment..... \$	89,679	61,948	- 30.92	57,723	- 6.82
Value added in manufacture. \$	1,609,765,194	1,162,041,572	- 27.81	1,159,316,687	- .23
Value of products..... \$	3,667,180,375	2,516,977,811	- 31.36	2,439,843,766	- 3.06
Average value products per establishment..... \$	159,846	115,078	- 28.00	109,982	- 4.43
Piece-workers ¹No.	11,422	11,777	+ 3.11	6,095	- 48.25
Earnings of piece-workers.... \$	2,763,910	2,468,231	- 10.69	1,284,437	- 47.10

¹ Not included in general statistics of number of employees or earnings.

Value of Products.—The gross value of manufactured products for 1922 was reported as \$2,439,843,766; the cost of materials was \$1,280,527,079, leaving \$1,159,316,687 as the value added by manufacture. As the finished products of one branch of manufacture are constantly used as materials in other branches¹ in the ascending scale of modern industry, it follows that they are counted over and over again, swelling in this manner the total gross value of products. The total value of manufactured products, strictly defined, would include (1) the value of all raw materials obtained from the extractive and primary production industries which have entered into the manufactured output, and (2) the entire value added to these raw materials by manufacturing processes from the time they first entered any factory up to the close of the census year. This value would be very much greater than the \$1,159,316,687 added by manufacture.

Consumption of Manufactured Products.—One of the beneficial results of placing the classification of the external trade and of production upon a common basis is exhibited in Table 4, where the value of commodities made available for consumption in Canada is derived from the statistics of the two important fields. For example, the value of all manufactured commodities made available during 1922 was \$2,499,221,674, obtained by adding the value of manufactured products in 1922 to the value of the imports of manufactured and partly manufactured goods

during the fiscal year ended March 31, 1923, and deducting the value of the corresponding exports for the same period. Vegetable products and textiles lead the other groups in the value of finished goods made available for consumption. The ascendancy of the vegetable products was due to the large production, as the imports and exports were nearly in balance. The production and imports of textiles were both important, while the exports were comparatively insignificant. The consumption of iron and steel products attained third place, the balance of trade being substantially unfavourable. It should be observed, however, that considerable duplication occurs in the value of manufactured products, where several processes are performed upon a commodity by different plants before it is ready for ultimate use.

4.—Consumption of Manufactured Products by Groups, 1922.

Groups of Industries.	Value of manufactured products.	Manufactured and partly manufactured goods.		Value of products available for consumption.
		Value of imports.	Value of exports.	
Total.....	\$ 2,439,843,766	\$ 574,551,323	\$ 515,173,415	\$ 2,499,221,674
Vegetable products.....	537,535,801	103,699,106	101,483,868	539,751,039
Animal products.....	371,552,013	20,296,958	81,317,173	310,531,798
Textile products.....	308,560,103	132,345,046	4,163,256	436,741,893
Wood and paper.....	489,814,782	35,198,116	212,780,800	312,232,098
Iron and its products.....	331,584,903	136,135,919	51,108,971	416,611,851
Non-ferrous metals.....	70,855,693	34,781,416	28,878,931	76,758,178
Non-metallic minerals.....	109,627,454	40,133,823	6,229,608	143,541,669
Chemicals and allied products.....	95,944,185	25,793,101	10,827,723	110,909,563
Miscellaneous industries.....	124,358,832	46,167,838	18,383,085	152,143,585

NOTE.—Statistics of manufactured products are for the calendar year 1922. Imports and exports of manufactured and partly manufactured goods are for the fiscal year ended March 31, 1923.

Production of Manufactured Goods according to the Purpose Classification.—In addition to the classification according to the component material of the chief product of value, used by the industrial census in detailed presentation, a parallel classification based on the purpose of the chief product was applied for the first time to the census returns of 1922.

In analysing the relative standing of the two purpose groups which are perhaps of greatest interest, it is noted that the gross production of the food industries was 27·6 p.c. of the output of Canadian manufacturing concerns, as compared with an output of 9·7 p.c. for the clothing industries. The greater production of the food group, however, was in part due to the higher cost of raw materials, the value added by manufacturing being 15·7 p.c. of the total for all industries in the case of the food group and 10·2 p.c. for the clothing group. The clothing industries maintained a larger payroll, in spite of the fact that a smaller output was recorded than in the food industries, this apparent anomaly being perhaps accounted for by the greater prevalence of female employment in the clothing industries. As compared with the total industrial payrolls, the employment in the clothing and food groups was 15·3 p.c. and 14·4 p.c. respectively. The standing of the manufacturing industries of Canada according to the purpose classification is shown in Table 5.

5.—Principal Statistics of the Manufacturing Industries of Canada, classified according to the Purpose of the Principal Product, 1922.

(All establishments irrespective of the number of employees.)

Purpose Headings.	Estab-lish-ments.	Capital.	Em-employees.	Salaries and wages.	Cost of materials.	Net value of products.	Gross value of products.
	No.	\$	No.	\$	\$	\$	\$
Total	22,184	3,125,772,761	462,573	497,113,554	1,280,527,079	1,159,316,687	2,439,843,766
Food	8,245	341,662,489	66,444	67,306,446	490,731,438	181,434,270	672,165,708
Breadstuffs	3,628	132,738,995	29,802	30,415,111	184,849,830	77,943,813	262,793,643
Fish	933	22,116,338	5,713	3,041,315	15,578,633	9,986,856	25,565,489
Nuts, fruits and vege- tables	304	26,918,250	4,770	3,753,740	15,639,275	10,957,008	26,596,283
Meats	113	57,383,902	9,975	12,606,041	115,870,403	28,733,273	144,603,676
Milk products	3,095	36,824,319	9,306	9,351,329	80,773,029	24,199,017	104,972,046
Oils and fats	7	202,251	41	44,106	153,862	173,111	326,973
Sugar	28	39,263,625	3,123	3,811,221	57,944,408	16,250,536	74,194,944
Infusions	56	12,278,485	1,746	2,085,549	12,917,775	5,932,653	18,850,428
Miscellaneous	81	13,936,324	1,968	2,198,034	7,004,223	7,258,003	14,262,226
Drink and tobacco	496	104,047,461	13,402	13,777,986	33,027,203	66,502,616	99,529,819
Beverages, alcoholic ..	59	50,042,259	3,170	4,369,827	9,671,740	19,500,535	29,172,275
Beverages, non-alco- holic	295	10,145,288	1,681	1,992,573	3,206,525	4,524,059	7,730,584
Tobacco	142	43,859,914	8,551	7,415,586	20,148,938	42,473,032	62,626,960
Clothing	1,279	175,076,687	70,931	65,595,519	118,749,053	117,804,140	236,553,193
Boots and shoes	191	44,356,619	18,329	17,633,428	27,188,590	33,025,098	60,213,688
Fur goods	234	9,956,387	3,328	3,451,868	7,706,317	5,946,521	13,652,838
Garments and per- sonal furnishings	573	67,055,059	31,193	30,239,672	55,600,218	49,766,393	105,366,611
Gloves and mitts	47	3,096,725	1,145	1,099,019	1,608,687	1,767,041	3,375,728
Hats and caps	77	4,781,217	2,262	2,380,981	3,659,108	4,381,635	8,040,743
Knitted goods	141	44,238,091	14,179	10,572,476	22,543,671	22,419,583	44,963,254
Waterproofs	16	1,592,589	225	218,075	442,462	497,869	940,331
Personal utilities	936	56,060,262	16,904	17,080,049	21,879,031	35,379,445	57,258,476
Jewelry and time- pieces	87	6,989,985	1,854	2,208,988	2,965,294	3,621,128	6,586,422
Recreational supplies	107	19,737,641	4,245	4,732,574	6,575,897	8,792,852	15,368,749
Soap and toilet articles	68	15,781,244	1,874	2,215,316	8,604,634	7,237,271	15,841,905
Personal utilities, n.e.s.	674	13,551,392	8,931	7,923,171	3,733,206	15,728,194	19,461,400
House furnish- ings	500	75,168,053	18,032	19,861,883	24,956,960	38,004,090	62,961,050
Books and sta- tionery	1,557	82,240,691	28,103	36,920,804	27,190,071	71,928,898	99,118,969
Vehicles and ves- sels	1,116	158,708,055	26,865	33,488,604	86,057,295	67,020,630	153,077,925
Producers' materials	5,285	1,011,268,819	135,845	139,533,410	316,400,400	319,818,227	636,218,627
Farm materials	17	3,935,467	344	348,879	1,098,230	883,188	1,981,418
Manufacturers' materials	610	670,503,444	71,526	76,314,854	178,622,228	196,358,351	374,980,579
Building materials ..	4,184	255,743,609	47,887	46,501,654	108,161,099	92,195,922	200,357,021
General materials	474	81,086,299	16,088	16,368,023	28,518,843	30,380,766	58,899,609
Industrial equipment	2,640	1,116,579,810	85,178	102,487,465	158,571,274	259,472,307	418,043,581
Farming equipment ..	108	94,120,312	6,390	7,270,129	8,259,009	10,615,607	18,874,616
Manufacturing equip- ment	161	40,992,114	5,889	7,284,141	4,508,428	13,702,777	18,211,205
Trading equipment ..	163	5,767,880	1,477	2,026,612	1,222,507	4,246,326	5,468,833
Service equipment ..	190	27,116,913	4,354	5,061,526	7,486,530	12,566,256	20,052,786
Light, heat and power	1,260	796,281,448	37,035	47,098,695	80,167,241	154,399,384	234,566,625
General equipment ..	758	152,301,143	30,033	33,746,362	56,927,559	63,941,957	120,869,516
Miscellaneous	30	4,960,434	869	1,061,388	2,964,354	1,952,064	4,916,418

The Forty Leading Industries.—During 1921 and 1922 the flour and grist-mill products industry maintained its place as the industry with the largest gross production. The pulp and paper industry, holding third place in 1921, moved into second rank in the following year, with an increase of nearly \$8,000,000 in the gross production. The flour and grist-mill and the slaughtering and meat-packing industries, holding a very high rating in gross value of products, rank comparatively low in number of wage earners employed and in the value added by manufacture. The cost of materials represented a large proportion of the gross production in the case of the two industries in question, and the proportion distributed in salaries and wages was relatively smaller.

6.—Principal Statistics of Forty Leading Industries, 1921.

Arranged in order of the gross value of production.

Industries.	Estab- lish- ments.	Capital Invested.	Cost of Materials.	Value of Products.
	No.	\$.\$	\$
1 Flour and grist-mill products.....	582	59,234,847	153,445,024	179,632,246
2 Slaughtering and meat-packing.....	84	58,459,555	113,389,835	153,136,289
3 Pulp and paper.....	100	379,812,751	62,276,224	151,003,165
4 Saw, lath and shingle mills.....	3,126	186,019,994	57,242,686	116,891,191
5 Butter and cheese.....	3,087	27,535,634	77,797,821	97,653,426
6 Electric light and power.....	857	484,669,451	—	72,636,094
7 Sugar, refined.....	7	35,783,067	56,882,242	69,509,827
8 Automobiles.....	14	40,080,269	45,119,345	67,050,209
9 Cotton yarn and cloth.....	31	65,947,429	35,157,233	65,978,596
10 Rolling mills and steel furnaces.....	39	121,859,860	34,820,791	56,201,810
11 Printing and publishing.....	836	38,788,973	15,412,712	53,613,061
12 Tobacco, cigars and cigarettes.....	94	35,757,047	15,374,386	52,050,244
13 Petroleum, refined.....	11	55,630,864	35,850,653	51,565,403
14 Bread and other bakery products.....	1,658	23,551,215	29,202,936	51,367,917
15 Biscuits and confectionery.....	372	30,655,539	22,600,821	46,758,014
16 Boots and shoes, leather.....	177	31,644,855	23,379,183	44,665,381
17 Electrical apparatus and supplies.....	96	62,725,361	19,215,135	44,497,268
18 Clothing, men's factory.....	162	30,244,384	29,929,415	43,766,569
19 Foundries and machine shop products.....	325	62,152,439	17,221,919	42,205,275
20 Steam railway cars.....	11	52,873,569	22,910,095	40,245,831
21 Agricultural implements.....	75	94,129,064	17,946,282	36,763,160
22 Hosiery and knit goods.....	127	37,906,361	18,960,491	36,689,534
23 Clothing, women's factory.....	176	13,694,846	18,617,634	35,256,026
24 Woodworking, sash and door factories.....	758	41,239,799	18,434,190	35,186,135
25 Printing and bookbinding.....	625	28,275,937	10,853,841	33,414,432
26 Breweries.....	55	37,645,447	9,714,486	30,931,853
27 Plumbing and tinmithing.....	2,137	12,219,038	13,777,756	28,260,326
28 Sheet metal products.....	129	27,681,041	13,219,712	26,774,936
29 Rubber goods.....	23	38,420,786	12,219,987	25,618,042
30 Furniture and upholstery.....	345	28,878,955	8,528,820	23,975,369
31 Leather tanneries.....	119	32,137,488	15,157,358	22,905,528
32 Industrial machinery.....	112	40,000,370	6,011,038	21,608,218
33 Fish-curing and packing.....	842	19,411,990	11,708,478	18,894,132
34 Gas, lighting and heating.....	50	37,097,280	9,279,697	18,772,285
35 Paints and varnishes.....	49	20,330,951	9,714,521	18,044,325
36 Furnishing goods, men's.....	82	11,800,238	10,229,398	17,946,293
37 Heating and ventilating appliances.....	54	24,159,408	4,777,045	16,119,383
38 Tobacco, chewing and smoking.....	25	11,993,028	8,064,946	14,910,006
39 Wire and wire goods.....	44	17,009,842	7,455,336	14,784,891
40 Automobile parts and accessories.....	64	15,700,288	8,229,855	14,783,017
Total for forty leading industries.....	17,560	2,473,159,310	1,100,129,327	1,993,065,707
Total for all industries.....	21,872	3,052,818,103	1,354,936,239	2,516,977,811
Percentage of forty industries to total of all industries.....	80.29	81.01	81.93	79.19

7.—Principal Statistics of Forty Leading Industries, 1922.

Arranged in order of the gross value of production.

Industries.	Estab- lish- ments.	Capital Invested.	Cost of Materials.	Value of Products.
	No.	\$	\$	\$
1 Flour and grist-mill products.....	1,364	68,453,886	136,687,078	166,881,455
2 Pulp and paper.....	104	381,006,324	64,692,722	158,950,956
3 Slaughtering and meat-packing.....	81	56,372,372	115,020,042	142,998,949
4 Saw, lath and shingle mills.....	2,922	162,835,219	60,812,017	114,324,580
5 Butter and cheese.....	3,072	30,648,068	74,714,681	95,470,701
6 Electric light and power.....	905	568,068,752	—	82,328,866
7 Automobiles.....	14	47,761,964	54,408,719	81,956,429
8 Cotton yarn and cloth.....	33	76,099,980	34,694,760	72,174,728
9 Sugar, refined.....	7	36,691,472	56,493,942	70,822,782
10 Petroleum, refined.....	13	61,253,400	38,129,880	56,495,821
11 Printing and publishing.....	746	38,972,589	11,944,412	50,993,039
12 Bread and other bakery products.....	1,865	25,551,612	24,708,136	47,845,811
13 Tobacco, cigars and cigarettes.....	108	31,482,001	12,232,348	46,066,697
14 Boots and shoes, leather.....	181	29,881,921	22,259,765	45,503,858
15 Hosiery and knit goods.....	141	44,238,091	22,543,671	44,963,254
16 Biscuits and confectionery.....	368	33,680,280	19,917,649	42,416,311
17 Clothing, women's factory.....	293	18,788,061	21,840,782	41,643,514
18 Electrical apparatus and supplies.....	101	62,436,282	17,546,839	41,208,368
19 Planing mills, sash and door factories.....	787	43,091,844	20,116,621	37,426,667
20 Foundries and machine shop products.....	275	55,288,466	13,960,752	38,507,734
21 Clothing, men's factory.....	148	25,029,072	18,481,429	35,135,395
22 Rubber goods.....	52	36,177,799	14,366,255	31,777,497
23 Printing and bookbinding.....	658	29,280,780	9,268,754	30,565,620
24 Sheet metal products.....	125	30,614,573	16,128,924	30,209,584
25 Railway cars and parts (steam).....	23	54,653,320	11,180,198	26,310,776
26 Breweries.....	53	34,788,432	8,125,364	25,875,730
27 Steel and rolled products.....	21	62,273,866	14,945,039	25,798,723
28 Fish-curing and packing.....	933	22,116,338	15,578,633	25,565,489
29 Leather tanneries.....	116	32,818,775	15,754,951	25,398,238
30 Furnishing goods, men's.....	116	17,215,963	12,643,854	23,292,716
31 Furniture and upholstered goods.....	157	28,892,791	7,970,902	22,138,742
32 Paints and varnishes.....	53	21,073,706	11,354,903	20,230,545
33 Gas, lighting and heating.....	48	39,615,765	8,580,208	19,089,170
34 Automobile supplies.....	62	16,545,641	10,674,176	19,007,824
35 Agricultural implements.....	73	92,566,964	7,967,767	18,240,381
36 Fruit and vegetable canneries.....	229	18,633,839	10,832,758	18,036,419
37 Heating and ventilating appliances.....	54	25,583,965	5,856,365	17,910,528
38 Wire and wire goods.....	48	17,327,775	9,112,850	15,616,454
39 Industrial machinery and elevators.....	106	38,047,363	4,070,072	15,418,364
40 Woollen cloths.....	64	20,846,502	7,039,177	15,410,537
Total for forty leading industries.....	16,519	2,536,705,813	1,042,607,395	1,938,019,252
Total for all industries.....	22,184	3,125,772,761	1,280,527,079	2,439,843,766
Percentage of forty industries to total of all industries.....	74.46	81.15	81.42	79.43

Establishments Classified According to Size.—The tendency of manufacturing to become concentrated in large establishments, or the reverse, is a matter of interest from the standpoint of industrial organization.

In order to throw some light upon this subject, statistics are presented in Tables 8 and 9 of establishments grouped, first, according to value of products and secondly, according to number of employees. Of the 22,184 establishments reported as engaged in manufacturing industries in 1922, there were 410 or 1.85 p.c., whose products were valued at more than \$1,000,000 each. The corresponding figures for 1917 were 474 establishments out of a total of 34,392 or 1.38 p.c. Changes in the price level as well as in the list of industries included in the total unfortunately interfere with the exact comparability of the results.

8.—Establishments and Total Production of Canadian Manufactures by Groups of Values, 1922.

Groups of Values.	Number of Establishments.	Total Production.	Average Production.
		\$	\$
Under \$25,000.....	14,775	111,052,745	7,516
\$ 25,000 but under \$ 50,000.....	2,350	83,296,266	35,445
50,000 " 100,000.....	1,756	126,795,458	72,206
100,000 " 200,000.....	1,328	187,791,505	141,409
200,000 " 500,000.....	1,061	325,014,561	306,328
500,000 " 1,000,000.....	504	355,702,222	705,758
1,000,000 " 5,000,000.....	354	674,598,410	1,905,645
5,000,000 and over.....	56	575,592,599	10,278,439
Total.....	22,184	2,439,843,766	109,982

The best classification of establishments to bring out the feature of size is a classification according to the number of employees engaged. In 1922, 437 establishments or about 2 p.c. employed more than 200 persons each, aggregating 194,946 or 42 p.c. of the total payroll. Table 9 shows the total number of establishments in Canada during 1922, grouped according to the number of employees engaged.

9.—Number of Establishments and of Employees in Canadian Manufactures, grouped according to the number of Employees per Establishment, 1922.

Number of Employees per Establishment.	Number of Establishments.	Number of Employees.	Average Number Employed.
Fewer than 5 persons.....	14,750	26,407	1.7
5 to 20 persons.....	3,695	40,714	11.0
21 " 50 "	1,858	60,362	32.4
51 " 100 "	938	67,619	72.0
101 " 200 "	506	71,338	140.9
201 " 500 "	335	103,232	308.1
501 and over.....	102	91,714	899.1
Total.....	22,184	461,386	20.7

3.—Production by Groups and Industries.

One of the factors accelerating the progress of Canada is the possession of many natural resources favourable to industrial prosperity. It is upon the country's agricultural resources, forests, minerals and wild life, that Canada's industries are mainly based. The sea and lake fisheries, in addition, make an important contribution of raw material to the manufacturing industries of the Dominion.

However, the industrial development of Canada was a matter of small beginnings and gradual growth in the face of difficulty over a period of many years. In the pioneer days, eastern Canada, though with a sparse population, set out modestly but not less surely upon the path of progress. The comparatively small home market, restricted at the present time to a population of nine millions, a large part of it in scattered agricultural areas, is one of the difficulties of the present situation. Yet Canada is now not merely the second largest manufacturing country in the British Empire, but the exports to the other Dominions consist largely of manufactured goods. The exports of manufactured and partly manufactured goods to the United States also exceed the exports of raw material. The rate at which this movement is to continue depends almost entirely upon growth within the Dominion—upon the further development of the many-sided physical assets of the country. A classification based on the component material of the chief product of value in each manufacturing establishment was applied for the first time in the compilation of the returns for 1920. The number of groups was reduced from fifteen to nine to correspond with the external trade classification, and the classes of industry were somewhat altered to conform with recent industrial organization.

The Vegetable Products Group.—With the exception of rubber and sugar factories, the industries of this group are dependent mainly upon domestic farm products as raw materials. The milling industry, which has existed to meet domestic needs for more than 300 years, is one of the Dominion's oldest industries, but it is only within recent times that its progress has become spectacular. The war and the demand it created gave a great impetus to this trade, and the 434 flour mills, many of them of the most modern type and highest efficiency, have now attained a capacity far in excess of Canada's demands—sufficient, indeed to produce flour for no fewer than 20 million people. During 1922, productive capacity reached 134,125 barrels per day, and during the crop year ended August 31, 1923, about 11 million barrels were exported to many countries, Great Britain and Germany receiving the largest consignments. The flour manufactured from Canadian hard spring wheat is particularly sought after in overseas markets, and this, as well as similar products, is also finding a ready sale in the far East, where bread is being consumed to a greater extent than formerly. Other industries contributing largely to food manufacture are sugar refineries and, to a lesser degree, plants engaged in the canning of fruit and vegetables.

Raw material imported from tropical countries forms the basis for an industry of a different character. Canada now stands fourth among the countries of the world as a manufacturer of rubber goods. Existing plants represent a capital of over \$50,600,000 and find employment for about 10,400 workers.

Animal Products.—Another form of food manufacture—that associated with slaughtering and meat production—has also made great strides. It comes as a surprise to many that slaughtering and meat-packing was until lately at the head of all other single industries in regard to the value of the products, and is now only surpassed by the pulp and paper and flour-milling industries. The leather industries have long been established on a considerable scale, mainly, of course, because the large number of cattle raised and slaughtered provide a ready supply of hides. There are large tanneries in the eastern provinces, and no fewer than 181 boot and shoe factories were in operation in 1922, chiefly in Quebec and Ontario, representing a total capital of nearly \$29,900,000, with an annual output of

\$45,504,000 and employing 13,704 men and women. The canning and preserving of fish calls for a more detailed reference. Concentrated, naturally, upon the Pacific and Atlantic coasts, this industry has become one of the most important, not, perhaps, as much from the point of view of achievement as of promise. In 1922, there were in existence 578 establishments canning lobsters, 67 canning salmon, 267 fish-curing plants and 28 dealing with catches of lesser amounts. One recent development of great possibilities is the setting up of establishments to utilize the catches from the large northern lakes of the Prairie Provinces, stocks in which are so large as to be beyond computation.

Textiles.—So far as textiles are concerned; Canada is not yet self-contained. Although production of every kind, cotton and woollen fabrics, hosiery, knitted goods, men's and women's clothing and so forth, amounted in 1922 to a total of over \$308,560,000, considerable quantities of yarns and cloth are imported. The Canadian textile factories are capable of supplying ordinary domestic needs without undertaking the production of the highest grade of materials such as are manufactured in Great Britain, where for two centuries hereditary skill has been developing. The imports of manufactured or partly manufactured textiles during the fiscal year ended March, 1923, were \$132,300,000 or 43 p.c. of the gross value of the manufactured product during the calendar year 1922.

The woollen industry may be divided into four sections, according as the chief product of value is cloth, yarn, carpets and mats or miscellaneous goods. Of the 137 plants in operation during 1922, 64 were engaged chiefly in manufacturing cloth, 17 in making yarns, 21 in making carpets and rugs and 35 in making miscellaneous woollen goods. The total value of woollen goods manufactured by the four classes of mills during 1922 amounted to \$15,400,000, as compared with \$13,696,000 in 1921. The wool clip in Canada during 1922 was 18,532,392 lbs., valued at nearly \$3,244,000. The imports were 15,900,000 lbs., while the exports of domestic and foreign production were 8,100,000 lbs. Thus the apparent consumption of wool in 1922 was 26,289,000 lbs. The quantity of wool used in the knitting and woollen mills in 1922 was 18,136,534 lbs., worth \$5,468,968. The portion used by the knitting mills was 3,411,686 lbs. In addition to the imports of raw wool valued at \$3,883,000, the following intermediate woollen and worsted goods were imported during 1922 for further manufacture in Canadian mills (values given in parentheses): noils 955,704 lbs. (\$410,649), worsted tops 8,042,304 lbs. (\$3,865,164), wool waste 271,979 lbs. (\$110,123), woollen yarn 2,862,258 lbs. (\$3,444,407), woollen and worsted yarn 593,567 lbs. (\$562,578).

A sketch of the cotton industry, which is the most important of the textile group, is given under the heading of Typical Individual Manufactures, near the end of the section.

Wood and Paper.—An outstanding feature of the general expansion of Dominion commerce since the opening of the century has been the change in the industries associated with forestry. Lumber output fluctuated greatly, and actually decreased in recent years, as a result of the post-war depression in the usual markets. For example, in 1911 the output of manufactured lumber was 4,918,000,000 board feet, valued at \$75,831,000, as compared with 3,138,598,000 feet, valued at \$84,554,172, in 1922. In contrast with this is the progress in pulp and paper production. Forty years ago, there were in existence in Canada only 36 paper and five pulp mills. In 1922, there were 104 pulp and paper mills consuming more than 2,900,000 cords of pulpwood a year, and using hydro-electric energy to the extent of over

629,000 h.p. Production of wood pulp in 1917 was 1,464,308 tons, and in 1922 2,150,251 tons. Production of newsprint in 1917 was 689,847 tons, in 1921, 805,114 tons and in 1923, 1,263,000 tons. The rate of expansion is increasing, newsprint output in the first seven months of 1924 being 788,628 tons, compared with 724,841 tons in the corresponding period of the preceding year.

Iron and Steel.—The primary production of iron and steel in Canada has always been handicapped by the fact that nowhere in Canada are workable deposits of coal and iron ore to be found in juxtaposition. The nearest approach is in Nova Scotia, where there is an abundant supply of coal, and iron ore is obtained from Newfoundland. In central Canada, particularly in Ontario where the secondary iron and steel industries are chiefly located, there are at present neither supplies of coal nor high-grade deposits of iron ore. There is a possibility, however, that high-grade bodies of ore may be found and eventually the huge reserves now known to exist, though they require an unduly expensive smelting process, will become more valuable. From the manufacturing or fabricating standpoint, conditions are much more favourable, as these areas are abundantly supplied with both hydro-electric power and the metals such as nickel, chromium, molybdenum, etc., used in the manufacture of alloy steels, which form an increasingly large part of the output from modern steel works. Many plants now specialize in the large-scale production of special steels that depend for their successful utilization on the forging and heat-treating operations to which they are submitted.

Iron ore, which was imported largely from Newfoundland and the State of Minnesota, was ultimately treated in 1922 in 25 active furnaces and rolling mills, with a capital of \$78,687,321 and a gross production valued at \$35,427,053. There were, in the last year for which complete returns are available, no fewer than 1,040 establishments handling iron and steel products, aside from the numerous custom and repair shops engaged in re-conditioning iron and steel goods. The plants represented a capital of \$526,109,953 and had a gross output valued at \$331,584,903. A great deal of this output is represented by agricultural implements, for which there is a large domestic demand, by factory equipment and commercial and passenger motor vehicles. Output of automobiles has in recent years advanced at a rapid rate, the total production in 1922 being 101,007 cars of various classes. The production of 1923 was valued at \$97,369,814, an increase of 47 p.c. over 1918; 147,582 cars were produced.

Non-Ferrous Metals.—During 1922 there were 325 plants in Canada manufacturing products from metals other than iron and steel. The depression which was general throughout this group of industries in the preceding year continued during 1922, but toward the close of the year considerable improvement was noted. The aluminium, brass and copper products, lead, tin and zinc products and miscellaneous non-ferrous metal goods industries all showed slight increases over the previous year's production, but these were more than offset by the decrease in the electrical apparatus industry. The trend in employment showed a gradual improvement from a minimum of 12,762 wage earners on the rolls in January to the maximum for the year, attained in December, when 15,563 persons were employed. It is noteworthy that primary non-ferrous metals having a value on the world's markets of \$61,601,789 were produced from Canadian ores in 1922.

The aluminium industry in America dates from 1890, when the first successful process was worked out for the economical extraction of the metal from its ores.

The lightness and ductility of the metal, and the fact that it is not readily attacked by organic acids, air or water, together with its capacity for transmitting heat readily, soon brought it into favour as a material for kitchen utensils, and in this connection it has become well known. Large quantities of aluminium wire are now used for electric transmission lines and quantities are used in the manufacture of such apparatus as cream separator parts and other light machinery. Alloyed with magnesium, it possesses great tensile strength and finds extensive use. Aluminium bronzes, too, are widely used, and during the war great quantities were utilized in the manufacture of aeroplane engines and parts.

An encouraging outlook for the electrical apparatus group is indicated by recent employment returns. About 100 plants were engaged during 1922 in manufacturing generators, motors, batteries, telephone and telegraph equipment, copper wires and cables, electric lamps, meters, vacuum cleaners and electrical fixtures of all kinds, of a total value of \$41,208,000. The development of cheap electrical power has done much to popularize the use of electrical equipment, and the future demand for such apparatus will probably only be limited by the development of adequate power.

Another industry of some importance consisted of 83 firms engaged principally in the rolling, casting and manufacturing of brass and copper, the principal products being castings and machinery fittings, brass steam fittings, plates and sheets, rods and wire cloth. The selling value of the products was \$12,254,000, while the materials were worth \$5,106,000.

Non-metallic Minerals.—The gradual recovery in business conditions since 1921 is demonstrated by developments in the non-metallic mineral group. The recent expansion is accentuated by the growth of the petroleum-refining industry, which in 1922 produced more than half of the gross value of the entire production of the group. The 13 plants were located with a view to the economy of distribution, based on the greatest accessibility to the source of supply and the proximity of the markets. The refineries on the eastern and western coasts obtain their crude petroleum from South America, Mexico and the United States by tank steamers, bringing transportation costs to a minimum. Those situated in the central part of the Dominion are necessarily supplied by rail or pipeline. The more general use of the automobile has resulted in a continually expanding demand for gasoline and lubricating oils. The installation of oil-using equipment in industrial plants for generating power and in buildings of various kinds for heating purposes, has also accelerated the consumption of fuel oil.

The illuminating and fuel gas industry of Canada is chiefly centred in the larger cities, especially in parts of the country where manufacturing predominates. Coal gas and carburetted water gas are the most important products, but pintsch gas is made at many divisional points along the railways to meet the demand for lighting purposes on passenger trains. Acetylene gas is used in several prairie towns where the size of the municipality is not sufficient to warrant a gas plant. The facility with which by-products such as coke, tar and light oils are turned out in connection with large scale production, becomes an incentive to plant expansion, providing that a demand is assured by increasing population and industrial development in the vicinity. The burning of coke in the house furnace, the necessity of enriching the soils with available nitrates, the large increase of refrigerating operations, and the extended use of tar and tar products, have prompted the larger plants to increase their output. A few plants established in

smaller towns have ceased operations because of the competition of hydro-electric power, and where the scope of the operations did not encourage the installation of equipment for the recovery of by-products. Nevertheless, gas has its particular uses in the industrial field as well as for domestic purposes, and the statistics show that the industry is gaining ground annually. The coke industry of Canada is intimately connected with the iron and steel industry or dependent upon the demand of the non-ferrous smelting plants. Coke plants are maintained at Sydney, Hamilton and Sault Ste. Marie by the three principal iron and steel companies. In the western provinces, coke is made by the International Coal and Coke Company and the Crow's Nest Pass Company for sale chiefly to the Consolidated Mining and Smelting Company at Trail, B.C. The Granby Consolidated Mining, Smelting and Power Company manufactures coke at Anyox from Vancouver Island coal.

Other industries of a varied nature included in this group are the manufacture of asbestos products, the glass industry, the manufacture of abrasives, the preparation of ornamental and monumental stone and the bottling of aerated waters.

Chemicals.—Chemical industries, associated in many phases with the use of hydro-electric power, have recorded marked growth in Canada in recent years. Owing to Canada's great water power resources and in particular to the fact that many water powers are situated near tidal waters, there is an opportunity in this country for the expansion and establishment of new chemical industries. Electric refining, at first applied to copper only, is now being extended to all the metals, and the electric current is also employed in their extraction from the ores. The production of aluminium, of cyanamide, of new refractory materials and of graphite, have already created large industries. The fixation of nitrogen, with its many subsidiary industries, such as the manufacture of nitric acid, ammonium nitrate, explosives, etc., the reduction of magnesium and the production of innumerable chemical compounds, known at present only to the special trades requiring them, are now under commercial development. Noteworthy progress has been made in the output of calcium carbide, which can be readily marketed in countries dependent for their domestic manufacture on electrical energy derived from coal. Exports of this chemical, mainly to the United States, increased in value from \$161,000 in 1914 to \$2,261,000 in 1922. The development of cheap electrical power has contributed to the advance of industries using electro-thermic reactions, the intense heat which it is possible to develop by electrical means being an especially advantageous factor. The manufacture of chemicals during the war period represented enormous figures, and even in 1922 the output reached a total value of \$95,944,000. The products include commodities of such fundamental importance as fertilizers, calcium carbide, cyanamide, soap, paints, varnishes, wood distillates and so forth.

In certain well defined fields, the production of chemicals in Canada has attained world-trade importance; in many other lines, production in competition with imported chemicals is being carried on successfully, and latterly the manufacture of specific commodities for which there is a definite and continuous demand has proved an attractive field for small concerns. Several plants have been established, each of which specializes in the production of one or more of these necessities for the chemical trade. A study of the import statistics shows that many such opportunities still exist.

Financial and employment statistics for 1922 of each of the industries engaged in Canadian manufacturing are presented in Table 10.

10.—Statistics of the Numbers, Capital, Employees, Salaries and Wages, Cost of

No.	Groups and Kinds of Industries.	Number of Establishments.	Capital Employed.	Salaried Employees.		
				Male.	Female.	Salaries.
		No.	\$	No.	No.	\$
	Canada.....	22,184	3,125,772,761	58,709	16,175	133,850,436
	TOTALS BY GROUPS.					
1	Vegetable products.....	4,355	371,361,682	8,742	2,243	19,325,777
2	Animal products.....	5,118	201,829,414	8,758	1,719	15,627,177
3	Textile products.....	1,709	268,065,238	5,547	2,166	15,313,325
4	Wood and paper products.....	6,983	761,188,396	13,713	3,762	33,190,715
5	Iron and its products.....	1,040	526,109,953	9,128	2,361	21,934,583
6	Non-ferrous metals and products.....	325	102,208,275	3,161	1,040	7,426,358
7	Non-metallic mineral products.....	781	161,063,081	1,961	531	4,085,427
8	Chemicals and allied products.....	469	118,025,483	2,964	917	7,455,919
9	Miscellaneous industries.....	1,404	615,921,239	4,735	1,436	9,491,155
	TOTALS BY PROVINCES.					
1	Prince Edward Island.....	351	2,935,829	175	26	152,832
2	Nova Scotia.....	1,140	97,799,273	1,206	355	2,183,393
3	New Brunswick.....	885	81,789,934	1,342	323	2,682,242
4	Quebec.....	7,367	932,186,153	16,552	3,713	37,743,338
5	Ontario.....	9,174	1,643,187,941	31,675	10,099	74,145,772
6	Manitoba.....	768	84,662,378	2,458	682	5,718,577
7	Saskatchewan.....	606	30,268,144	956	169	1,814,007
8	Alberta.....	652	51,283,982	1,465	321	3,053,175
9	British Columbia.....	1,238	200,192,904	2,876	487	6,350,165
10	Yukon.....	3	1,466,223	4	-	6,935
	GROUP 1.—VEGETABLE PRODUCTS.					
	Total.....	4,355	371,361,682	8,742	2,243	19,325,777
1	Biscuits and confectionery.....	372	35,788,835	1,532	502	3,443,585
2	Bread and other bakery products.....	1,865	25,551,612	1,254	299	2,119,976
3	Breweries.....	53	34,788,432	472	68	1,328,356
4	Cigars and cigarettes.....	108	31,482,001	906	230	2,050,291
5	Cocoa and chocolate.....	5	4,245,916	68	21	167,940
6	Coffee and spice mills.....	51	8,032,569	331	93	867,810
7	Distilleries.....	6	15,253,827	69	2	189,307
8	Flour and grist-mill products.....	434	65,928,521	1,155	265	2,476,899
9	Chopping mills.....	930	2,525,365	-	-	-
10	Fruit and vegetable canneries.....	229	18,633,839	368	116	707,602
11	Ice cream cones.....	10	637,697	14	3	21,276
12	Linseed oil and oil cake.....	8	2,603,241	33	5	79,274
13	Macaroni and vermicelli.....	8	1,054,717	37	9	66,125
14	Malt mills.....	6	2,183,282	32	11	125,954
15	Maple syrup and sugar.....	5	248,919	17	4	38,425
16	Miscellaneous food products.....	47	5,389,742	181	57	380,200
17	Miscellaneous vegetable products.....	8	2,840,892	73	10	130,260
18	Pickles and vinegar.....	67	5,443,519	164	30	298,284
19	Rice mills.....	7	1,177,521	24	3	75,068
20	Rubber footwear.....	10	14,474,698	438	134	875,927
21	Rubber goods.....	52	36,177,799	948	231	1,976,810
22	Starch and glucose.....	9	5,674,843	48	32	120,402
23	Sugar refineries.....	7	36,691,472	271	46	773,366
24	Syrups.....	12	214,679	33	3	36,710
25	Tobacco, chewing and smoking.....	34	12,377,913	218	58	859,460
26	Wines and grape juice.....	12	1,939,831	56	11	116,469
	GROUP 2.—ANIMAL PRODUCTS.					
	Total.....	5,118	201,829,414	8,758	1,719	15,627,177
1	Animal hair goods.....	6	779,868	18	5	60,047
2	Belting and hose, leather.....	6	1,384,399	45	12	95,991
3	Boot and shoe findings.....	7	163,120	6	2	14,162
4	Boots and shoes, leather.....	181	29,881,921	1,343	393	3,607,463
5	Butter and cheese.....	3,072	30,648,088	3,259	452	3,493,793
6	Condensed milk.....	23	6,176,251	100	26	218,028
7	Fish-curing and packing.....	933	22,116,338	553	61	682,535
8	Fur dressing.....	12	535,996	34	7	89,284
9	Fur goods.....	222	9,420,391	451	135	983,165
10	Gloves and mittens, leather.....	47	3,096,725	171	37	388,810
11	Harness and saddlery.....	331	6,016,642	251	53	326,469
12	Human hair goods.....	3	22,548	1	-	2,100
13	Leather goods, n.e.s.....	39	1,185,219	66	27	159,853
14	Leather, tanned, etc.....	116	32,818,775	275	42	823,365

Materials and Value of Products of Canadian Manufacturing Industries, 1922.

Wage Earners.			Total Employees.			Cost of Materials.	Value of Products.		Σ
Male.	Fe-male.	Wages.	Male.	Fe-male.	Salaries and Wages.		Net.	Gross.	
No.	No.	\$	No.	No.	\$	\$	\$	\$	
295,244	92,445	363,263,118	353,953	108,620	497,113,554	1,280,527,079	1,159,316,687	2,439,843,766	1
35,931	16,301	45,099,145	44,673	18,544	64,424,922	330,589,052	206,946,749	537,535,801	1
30,277	8,841	34,306,502	39,035	10,560	49,933,679	264,078,631	107,473,382	371,552,013	2
31,658	48,677	60,911,036	37,205	50,843	76,224,361	153,066,593	155,493,510	308,560,103	3
92,551	8,436	98,894,199	106,264	12,198	132,084,914	206,682,820	283,131,962	489,814,782	4
60,722	2,377	68,670,574	69,850	4,738	90,605,157	168,282,265	163,302,638	331,584,903	5
11,245	2,776	14,025,271	14,406	3,816	21,451,629	30,861,895	39,993,798	70,855,693	6
11,518	578	14,639,353	13,479	1,109	18,724,780	63,377,262	46,260,192	109,637,454	7
7,624	2,577	9,314,584	10,588	3,494	16,770,503	47,039,926	48,904,259	98,467,185	8
13,718	1,882	17,402,454	18,453	3,318	26,893,609	16,548,635	107,810,197	124,358,832	9
636	282	472,368	811	308	625,200	2,621,443	1,783,594	4,405,037	1
9,780	2,239	9,386,430	10,986	2,594	11,569,823	37,828,238	28,713,454	66,541,692	2
9,987	2,547	9,398,598	11,329	2,870	12,080,840	38,058,622	26,555,515	64,614,137	3
88,656	36,028	103,258,899	105,208	39,741	141,002,237	337,168,085	358,975,190	696,143,225	4
150,329	45,216	194,516,958	182,004	55,315	268,662,730	676,725,112	597,699,690	1,274,424,802	5
8,228	2,421	12,172,487	10,686	3,103	17,891,094	54,619,248	39,798,360	94,417,608	6
2,698	303	3,748,138	3,654	472	5,562,145	22,450,051	16,222,777	38,672,828	7
4,239	976	5,896,730	5,704	1,297	8,949,905	30,306,985	21,203,492	51,509,887	8
20,085	3,433	24,390,613	23,561	2,920	30,740,778	80,749,935	68,246,533	148,996,468	9
6	-	21,897	10	-	28,832	-	118,082	118,082	10
35,931	16,301	45,099,145	44,673	18,544	64,424,922	330,589,052	206,946,749	537,535,801	
4,412	5,823	7,252,529	5,944	6,325	10,706,114	20,742,382	24,006,880	44,749,262	1
7,917	985	9,740,643	9,171	1,284	11,860,619	24,708,136	23,137,675	47,845,811	2
2,284	33	2,574,884	2,756	101	3,903,240	8,125,364	17,750,366	25,875,730	3
2,020	3,229	3,375,579	2,926	3,459	5,425,870	12,232,348	33,834,349	46,066,697	4
295	246	465,850	363	267	633,790	2,411,663	1,570,482	3,982,145	5
370	322	583,949	701	415	1,451,759	10,506,112	4,362,171	14,868,283	6
234	8	277,280	303	10	466,587	1,546,376	1,750,169	3,296,545	7
4,121	119	4,606,499	5,276	384	7,083,398	125,312,923	25,924,748	151,237,671	8
1,097	-	406,971	1,097	-	406,971	11,374,155	4,269,629	15,643,784	9
1,533	1,645	1,872,211	1,901	1,761	2,579,813	10,832,758	7,203,661	18,036,419	10
60	27	69,268	74	30	90,544	138,411	246,846	385,257	11
211	2	224,191	244	7	303,465	4,319,555	1,239,072	5,558,627	12
105	88	132,722	142	97	198,847	738,501	579,536	1,318,037	13
129	2	243,798	161	13	369,752	1,372,301	1,044,385	2,416,686	14
19	4	22,304	36	8	60,729	302,028	204,490	506,518	15
348	153	535,965	529	210	916,165	3,059,601	3,187,661	6,247,262	16
159	25	200,577	232	35	330,840	2,126,757	973,741	3,100,498	17
420	227	544,803	584	257	843,087	2,679,760	2,779,606	5,459,366	18
45	-	41,240	69	3	116,308	1,287,754	242,332	1,530,086	19
2,518	1,535	2,912,638	2,956	1,669	3,788,565	4,928,825	9,781,005	14,709,830	20
3,984	581	4,856,518	4,932	812	6,833,328	14,366,255	17,411,242	31,777,497	21
442	29	422,754	490	61	543,156	2,242,282	1,629,695	3,871,977	22
2,331	97	2,492,606	2,602	143	3,265,972	56,493,942	14,328,840	70,822,782	23
29	1	30,368	62	4	67,078	323,705	208,988	532,693	24
780	1,110	1,130,256	998	1,168	1,989,716	7,916,590	8,643,673	16,560,263	25
68	10	72,742	124	21	189,209	500,568	635,507	1,136,075	26
30,277	8,841	34,306,502	39,035	10,560	49,933,679	264,078,631	107,473,382	371,552,013	
82	19	90,776	100	24	150,823	243,271	393,426	636,697	1
98	-	95,656	143	12	191,647	500,546	457,561	958,107	2
46	17	64,441	52	19	78,603	328,423	158,992	487,415	3
7,666	4,302	10,237,400	9,009	4,695	13,844,863	22,259,765	23,244,093	45,503,858	4
4,744	150	5,093,176	8,003	602	8,586,969	74,714,681	20,755,020	95,470,701	5
518	57	546,332	618	83	764,360	6,058,348	3,442,997	9,501,345	6
2,813	1,099	2,358,780	3,366	1,160	3,041,315	15,578,633	9,986,856	25,565,489	7
380	49	363,954	414	56	453,238	181,804	646,783	828,587	8
996	1,276	2,015,465	1,447	1,411	2,998,630	7,524,513	5,299,738	12,824,251	9
483	722	710,209	654	759	1,099,019	1,608,687	1,767,041	3,375,728	10
972	71	916,479	1,223	124	1,242,948	2,692,882	1,983,739	4,676,621	11
5	12	9,401	6	12	11,501	20,892	20,382	33,191	12
203	250	356,845	269	277	516,698	595,053	766,083	1,361,136	13
3,397	140	3,479,553	3,672	182	4,302,918	15,754,951	9,643,287	25,398,238	14

10.—Statistics of the Numbers, Capital, Employees, Salaries and Wages, Cost of

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No.	Groups and Kinds of Industries.	Number of Establish- ments.	Capital Employed. \$	Salaried Employees.		
				Male.	Female.	Salaries.
		No.	\$	No.	No.	\$
GROUP 2.—ANIMAL PRODUCTS—						
concluded.						
15	Sausage, sausage casings.....	30	673,421	36	8	94,806
16	Slaughtering and meat-packing.....	81	56,372,372	2,118	438	4,516,231
17	Tallow and animal oils.....	7	202,251	8	5	18,122
18	All other industries.....	2	338,109	23	16	52,953
GROUP 3.—TEXTILES.						
Total.....						
		1,709	268,065,238	5,547	2,166	15,313,325
1	Awnings, tents and sails.....	52	1,724,556	97	27	192,721
2	Bags, cotton and jute.....	14	5,866,388	76	24	227,441
3	Batting.....	3	690,823	9	3	35,855
4	Carpets, mats and rugs.....	21	2,951,229	68	21	186,038
5	Clothing, men's factory.....	148	25,029,072	1,058	300	2,788,085
6	Clothing, women's factory.....	293	18,788,061	1,099	577	3,494,763
7	Cordage, rope and twine.....	9	7,556,143	61	19	191,992
8	Corsets.....	16	6,021,963	207	124	561,790
9	Cotton and wool waste.....	6	872,703	11	6	39,789
10	Cotton thread.....	7	3,842,060	57	25	151,329
11	Cotton yarn and cloth.....	33	76,099,980	416	92	1,234,857
12	Dyeing, cleaning and finishing.....	620	8,740,368	—	—	—
13	Furnishing goods, men's.....	116	17,215,963	632	239	1,584,531
14	Hats and caps.....	71	4,477,593	250	70	579,734
15	Hosiery and knit goods.....	141	44,238,091	690	348	1,920,123
16	Linen goods.....	5	999,671	20	4	54,954
17	Oiled and waterproof clothing.....	16	1,592,589	35	13	84,600
18	Silk and silk goods.....	7	4,618,448	205	127	490,134
19	Textiles, miscellaneous.....	13	3,020,989	183	25	384,113
20	Woollen cloth.....	64	20,846,502	244	64	684,678
21	Woollen goods, miscellaneous.....	35	6,458,146	82	33	268,814
22	Woollen yarns.....	17	6,846,505	43	24	146,538
23	All other industries.....	2	67,395	4	1	10,446
GROUP 4.—WOOD AND PAPER PRODUCTS.						
Total.....						
		6,983	761,188,396	13,713	3,762	33,190,715
1	Baskets and crates.....	28	1,029,751	30	10	63,652
2	Blue prints.....	11	85,655	7	—	13,445
3	Bobbins and spools.....	4	694,793	15	—	53,647
4	Boot and shoe findings.....	7	197,903	17	1	30,229
5	Boxes and packing cases.....	93	5,953,582	199	16	402,920
6	Boxes, cigar.....	4	672,488	18	10	41,300
7	Boxes, paper.....	86	12,153,682	380	92	1,023,491
8	Box shooks.....	8	457,353	7	2	18,398
9	Canoes, row-boats and launches.....	99	1,655,151	47	11	102,604
10	Carriages, wagons and sleighs.....	591	11,148,178	240	44	470,178
11	Carriages and sleds (children's).....	6	467,930	25	8	55,487
12	Carriage and wagon materials.....	15	1,474,645	31	10	95,512
13	Clothes pins.....	3	196,937	6	—	9,506
14	Coffins and caskets.....	34	2,856,526	71	18	175,059
15	Cooperage.....	100	1,838,696	40	7	84,716
16	Cork products.....	8	942,224	19	9	53,586
17	Fly paper.....	3	94,830	4	1	9,300
18	Foundry patterns.....	34	177,514	14	3	23,772
19	Furniture, other than wickerware.....	157	28,892,791	787	236	1,861,552
20	Furniture upholstering and repairing.....	185	1,638,975	99	26	182,161
21	Handles, wooden.....	16	595,634	18	3	36,382
22	Ladders and other wooden products.....	3	439,645	8	5	28,354
23	Lasts, trees and pegs.....	12	1,092,216	34	7	94,995
24	Lithographing and engraving.....	104	9,533,413	481	205	1,495,011
25	Paper goods, n.e.s.....	10	231,950	22	5	33,966
26	Paper patterns.....	6	854,145	27	34	71,456
27	Printing and book-binding.....	658	29,280,780	1,416	479	3,893,516
28	Printing and publishing.....	746	38,972,589	3,682	1,550	8,326,681
29	Pulp and paper.....	104	381,006,324	2,237	371	6,326,635
30	Pumps, wooden.....	32	1,519,691	52	18	84,000
31	Saw, lath and shingle mills.....	2,922	162,835,219	1,944	190	3,956,981
32	Show cases and store fixtures.....	15	1,272,993	51	4	126,616
33	Spinning wheels.....	3	10,140	—	—	—
34	Stationery and envelopes.....	16	3,505,028	180	83	445,453
35	Stereotyping and electrotyping.....	12	621,276	41	17	119,200
36	Wall board, building paper, etc.....	13	5,901,306	179	39	486,606
37	Wall paper.....	4	2,499,834	128	27	403,783

Materials and Value of Products of Canadian Manufacturing Industries, 1922—
tinued.

Wage Earners.			Total Employees.			Cost of Materials.	Value of Products.		No.
Male.	Fe-male.	Wages.	Male.	Fe-male.	Salaries and Wages.		Net.	Gross.	
No.	No.	\$	No.	No.	\$	\$	\$	\$	
138	8	159,810	174	16	254,616	715,878	473,105	1,188,983	15
6,710	466	7,771,081	8,828	904	12,287,312	115,020,042	27,978,907	142,998,949	16
22	6	25,984	30	11	44,106	153,862	173,111	326,973	17
8	6	11,160	31	22	64,113	134,483	281,261	415,744	18
31,658	48,677	60,911,036	37,205	50,843	76,224,361	153,066,593	155,493,510	308,560,103	
178	224	329,085	275	251	521,806	879,454	791,681	1,671,135	1
313	505	635,998	389	529	863,439	8,701,562	2,268,662	10,970,224	2
62	8	62,521	71	11	98,376	254,609	260,638	515,247	3
574	239	792,047	642	260	978,085	1,468,725	2,001,677	3,470,402	4
3,813	4,607	7,863,109	4,871	4,907	10,651,194	18,481,429	16,653,966	35,135,395	5
2,555	8,485	9,342,695	3,654	9,062	12,837,458	21,840,782	19,812,732	41,653,514	6
776	236	882,573	837	255	1,074,565	2,934,440	2,846,721	5,781,161	7
95	1,307	684,531	302	1,431	1,246,321	2,634,153	2,650,833	5,284,986	8
73	15	66,385	84	21	106,174	901,666	429,896	1,331,562	9
148	511	514,747	205	536	666,076	2,011,236	2,346,105	4,357,341	10
10,149	8,355	12,529,766	10,565	8,447	13,764,623	34,694,760	37,479,968	72,174,728	11
3,341	4,149	6,538,832	3,341	4,149	6,538,832	1,733,273	12,916,453	14,649,726	12
958	5,139	3,920,168	1,590	5,378	5,504,699	12,643,854	10,648,862	23,292,716	13
862	894	1,652,368	1,112	964	2,232,102	3,517,048	4,107,402	7,624,540	14
3,699	9,442	8,652,353	4,389	9,790	10,572,476	22,543,671	22,419,583	44,963,254	15
42	187	146,863	62	191	201,817	260,441	382,089	642,530	16
82	95	133,475	117	108	218,075	442,462	497,869	940,331	17
281	854	745,996	486	981	1,236,130	2,267,250	2,407,955	4,675,205	18
188	220	295,799	371	245	679,912	2,392,018	1,314,556	3,706,574	19
2,464	2,153	3,559,881	2,708	2,217	4,244,559	7,039,177	8,371,360	15,410,537	20
462	363	683,531	544	396	952,345	2,027,729	2,303,739	4,331,468	21
536	680	869,017	579	704	1,015,555	3,324,348	2,525,996	5,850,344	22
7	9	9,296	11	10	19,742	72,506	54,767	127,273	23
92,551	8,436	98,894,199	106,264	12,198	132,084,914	206,682,820	283,131,962	489,814,782	
353	5	350,707	383	15	414,359	412,910	670,514	1,083,424	1
30	6	27,805	37	6	41,250	28,447	98,558	118,005	2
169	13	141,805	184	13	195,452	162,797	283,950	446,747	3
48	40	52,652	65	41	82,881	126,683	138,335	265,018	4
1,697	37	1,622,468	1,896	53	2,025,388	3,008,295	3,042,893	6,051,188	5
1,776	53	160,608	184	63	201,908	379,305	366,956	746,261	6
1,154	1,851	2,134,284	1,534	1,943	3,157,775	5,090,601	6,142,842	11,233,443	7
129	—	129,198	136	2	147,596	455,672	249,547	705,119	8
459	—	469,874	506	11	572,478	383,091	916,881	1,299,972	9
1,875	14	1,800,382	2,115	58	2,270,560	2,543,600	3,536,235	6,079,835	10
185	9	169,090	210	17	224,577	204,414	353,259	557,673	11
192	3	189,155	223	13	284,667	374,439	613,149	987,588	12
89	25	76,322	95	25	85,828	40,095	142,081	182,176	13
499	68	527,834	570	86	702,893	1,030,174	1,142,951	2,173,125	14
457	1	417,064	497	8	501,780	1,213,342	995,391	2,208,733	15
125	60	159,458	144	69	213,044	472,221	642,908	1,115,129	16
7	7	11,533	11	8	20,833	43,857	143,952	187,809	17
89	—	112,021	103	3	135,793	31,280	201,860	233,068	18
6,504	257	6,249,754	7,291	493	8,111,306	7,970,902	14,167,840	22,138,742	19
565	49	680,886	664	75	863,047	507,776	1,450,229	1,958,005	20
162	5	128,661	180	8	165,043	197,541	402,678	600,219	21
58	11	65,310	66	16	93,664	117,094	160,625	277,719	22
241	15	251,065	275	22	346,060	167,517	567,039	734,556	23
1,898	589	3,175,709	2,379	794	4,670,720	3,264,608	8,221,441	11,486,049	24
52	8	55,437	74	13	89,403	132,388	212,506	344,894	25
55	76	120,046	82	110	191,502	171,351	1,154,767	1,326,118	26
5,545	2,318	8,736,062	6,961	2,797	12,619,578	9,268,754	21,296,866	30,565,620	27
7,115	1,361	9,624,433	10,797	2,911	17,951,114	11,944,412	39,048,627	50,993,039	28
22,403	819	26,592,320	24,640	1,190	32,918,955	64,692,722	94,258,234	158,950,956	29
95	—	97,462	147	18	181,462	282,721	332,196	614,917	30
29,758	—	23,664,710	31,702	190	27,621,691	60,812,017	53,592,563	114,324,580	31
247	—	311,613	298	4	438,229	439,977	756,528	1,196,505	32
2	—	1,500	2	—	1,500	3,887	3,887	4,860	33
338	509	735,369	518	592	1,180,822	2,469,227	2,407,335	4,876,562	34
156	—	248,717	197	17	367,917	82,235	652,565	734,800	35
499	—	571,979	678	39	1,058,585	3,410,931	3,154,919	6,565,850	36
327	76	351,919	455	103	755,702	823,860	1,660,923	2,484,783	37

10.—Statistics of the Numbers, Capital, Employees, Salaries and Wages, Cost of con

No.	Groups and Kinds of Industries.	Number of Establish- ments.	Capital Employed.	Salaried Employees.		
				Male.	Female.	Salaries.
		No.	\$	No.	No.	\$
GROUP 4.—WOOD AND PAPER PRODUCTS—concluded.						
38	Waxed and oiled paper.....	7	1,417,219	44	26	144,111
39	Wickerware.....	10	55,454	6	—	8,782
40	Woodenware.....	10	1,116,262	21	5	54,844
41	Wood preserving.....	5	2,018,085	10	2	20,545
42	Wood-working, sash and door factories.....	787	43,091,844	1,040	181	2,160,859
43	All other industries.....	12	627,745	26	7	101,424
GROUP 5.—IRON AND ITS PRODUCTS.						
	Total.....	1,040	526,109,953	9,128	2,361	21,934,583
1	Agricultural implements.....	73	92,566,964	1,077	271	2,282,890
2	Automobiles.....	14	47,761,964	1,007	334	2,810,397
3	Automobile supplies.....	62	16,545,641	310	87	797,227
4	Bicycles and motorcycles.....	5	1,076,701	56	1	91,925
5	Boilers and engines.....	43	10,370,771	247	62	632,262
6	Foundries and machine shop products.....	275	55,288,466	1,142	249	2,951,586
7	Hardware and tools.....	111	36,729,088	557	195	1,379,340
8	Heating and ventilating appliances.....	54	25,583,965	714	208	1,663,784
9	Industrial machinery and elevators.....	106	38,047,363	915	283	2,165,738
10	Iron and steel fabrication.....	47	8,471,681	354	57	843,778
11	Office and household machinery.....	29	12,384,360	387	118	897,313
12	Pig iron and ferro-alloys.....	4	16,413,455	30	4	83,991
13	Railway cars and parts.....	23	54,653,320	860	132	1,853,668
14	Sheet metal products.....	125	30,614,573	776	221	1,793,517
15	Steel and rolled products.....	21	62,273,866	373	40	900,725
16	Wire and wire goods.....	48	17,327,775	323	99	786,442
GROUP 6.—NON-FERROUS METALS AND PRODUCTS.						
	Total.....	325	102,208,275	3,161	1,040	7,426,358
1	Aluminium and its products.....	9	7,632,722	84	16	175,602
2	Brass and copper products.....	83	17,608,876	535	135	1,225,484
3	Electrical apparatus and supplies.....	101	62,436,282	2,025	650	4,624,396
4	Lead, tin and zinc products.....	19	3,213,867	122	49	260,765
5	Miscellaneous non-ferrous metal products.....	16	663,070	27	5	59,614
6	Precious metal products.....	81	6,804,140	227	113	610,445
7	Silverware and silver-plated ware.....	16	3,849,318	143	72	470,052
GROUP 7.—NON-METALLIC MINERAL PRODUCTS.						
	Total.....	781	161,063,081	1,961	531	4,085,427
1	Abrasive products.....	6	1,190,891	18	6	53,027
2	Abrasives, artificial.....	5	3,756,845	28	3	57,509
3	Aerated and mineral waters.....	283	8,205,457	424	69	775,182
4	Asbestos and magnesia packing.....	7	666,770	15	6	32,927
5	Asbestos products.....	4	943,927	21	5	58,871
6	Cement products.....	124	1,553,160	71	8	81,965
7	Coke.....	6	20,363,785	38	—	99,565
8	Gas, illuminating and fuel.....	48	39,615,765	506	255	943,434
9	Glass plate, cut and ornamental.....	34	1,772,292	113	29	184,889
10	Glass, pressed and blown.....	11	13,281,035	132	39	385,072
11	Lubricating oils and greases.....	6	800,629	30	3	79,101
12	Mica-trimming.....	10	435,374	10	7	20,269
13	Petroleum-refining.....	13	61,253,400	298	64	753,834
14	Sand, lime and brick.....	11	1,224,808	22	2	54,418
15	Stone, ornamental and monumental.....	208	5,027,935	212	24	459,896
16	All other industries.....	5	971,005	23	11	45,168
GROUP 8.—CHEMICALS AND ALLIED PRODUCTS.						
	Total.....	469	118,025,483	2,964	917	7,455,919
1	Acids, alkalis and salts.....	21	30,811,922	316	45	650,918
2	Adhesives.....	17	2,108,688	44	10	115,637
3	Ammunition.....	3	3,202,561	43	2	84,786
4	Baking powder.....	6	1,637,770	94	72	218,776
5	Boiler compound.....	5	175,122	13	5	44,702
6	Cellulose products.....	10	1,746,117	34	10	80,162
7	Chemical products, n.e.s.....	6	123,514	12	2	22,821

¹ A revision, by which five establishments were added to the "railway cars and parts" industry and other changes effected, accounts for the difference between the figures given here and those in the report "Iron and Steel and Their Products in Canada, 1921 and 1922."

Materials and Value of Products of Canadian Manufacturing Industries, 1922—
tinued.

Wage Earners.			Total Employees.			Cost of Materials.	Value of Products.		No.
Male.	Fe-male.	Wages.	Male.	Fe-male.	Salaries and Wages.		Net.	Gross.	
No.	No.	\$	No.	No.	\$	\$	\$	\$	
143	50	220,233	187	76	364,344	1,221,095	882,211	2,103,306	38
35	5	38,092	41	5	46,874	31,735	79,097	110,832	39
370	41	327,232	391	46	382,076	422,011	713,335	1,135,346	40
167	—	125,806	177	2	146,351	1,737,605	746,931	2,484,536	41
7,987	48	7,870,153	9,027	229	10,031,012	20,116,621	17,310,046	37,426,667	42
96	7	107,471	122	14	208,895	395,696	305,312	701,008	43
60,722	2,377	68,670,574	69,850	4,738	99,605,157	168,282,265	163,302,638	331,584,903	
4,810	63	4,802,057	5,887	334	7,084,947	7,967,767	10,272,614	18,240,381	1
5,827	217	8,463,246	6,834	551	11,273,643	54,408,719	27,547,710	81,956,429	2
2,598	178	3,499,327	2,908	265	4,296,554	10,674,176	8,333,648	19,007,824	3
312	23	298,380	368	24	390,305	475,575	483,720	959,295	4
1,306	—	1,413,450	1,553	63	2,045,712	2,036,213	2,868,400	4,904,613	5
4,080	214	9,552,003	10,222	463	12,503,589	13,960,752	22,546,982	36,507,734	6
4,000	580	4,155,089	4,557	775	5,534,429	4,884,307	10,094,102	14,978,409	7
4,802	75	5,216,523	5,516	283	6,880,307	5,856,365	12,054,163	17,910,528	8
3,990	38	4,351,019	4,905	321	6,516,757	4,020,072	11,398,292	15,418,364	9
1,428	33	1,669,438	1,782	90	2,513,216	3,089,721	4,037,671	7,127,392	10
1,529	108	1,524,863	1,916	226	2,422,176	2,131,337	4,878,729	7,010,066	11
521	—	685,593	551	4	769,584	7,410,250	2,218,081	9,628,331	12
8,295	10	9,034,704	9,155	142	10,888,372	11,180,198	15,130,578	26,310,776	13
4,790	647	5,312,068	5,566	868	7,105,585	16,128,924	14,080,660	30,209,584	14
4,913	5	6,154,977	5,286	45	7,055,702	14,945,039	10,853,684	25,798,723	15
2,521	185	2,537,837	2,844	284	3,324,279	9,112,850	6,503,604	15,616,454	16
11,245	2,776	14,035,271	14,406	3,816	21,451,629	30,861,895	39,993,798	70,855,693	
559	50	642,262	643	66	817,864	1,997,488	1,854,437	3,851,925	1
2,491	296	2,854,341	3,026	431	4,079,825	5,106,224	7,147,467	12,253,691	2
5,993	1,962	7,538,211	8,018	2,162	12,162,607	17,546,839	23,661,529	41,208,368	3
351	12	467,737	473	61	728,502	2,048,431	1,070,014	3,118,445	4
91	46	138,604	118	96	198,218	370,770	370,770	607,567	5
1,131	306	1,518,688	1,358	419	2,129,133	2,926,455	3,506,501	6,432,956	6
629	104	865,428	772	176	1,335,480	999,661	2,383,080	3,382,741	7
11,518	578	14,639,353	13,479	1,109	18,724,780	63,377,262	46,260,192	109,637,454	
65	3	73,597	83	71	126,624	98,014	186,057	284,071	1
250	1	286,863	278	253	344,372	758,931	786,386	1,545,317	2
980	63	1,028,182	1,404	132	1,803,364	2,705,957	3,888,552	6,594,509	3
36	7	41,386	51	13	74,313	169,066	121,466	290,532	4
65	1	55,875	86	6	114,746	102,683	221,945	324,628	5
312	—	290,303	383	8	372,268	533,335	747,669	1,281,004	6
495	—	617,028	533	—	716,593	6,130,628	1,205,999	7,336,627	7
2,343	2	3,031,271	2,849	257	3,974,705	8,580,208	10,508,962	19,089,170	8
355	54	436,456	468	83	621,345	770,255	814,707	1,584,962	9
2,144	126	2,363,437	2,276	165	2,748,509	2,516,836	4,740,790	7,257,626	10
17	6	22,297	47	9	101,398	283,311	256,431	539,742	11
19	288	68,927	29	295	89,196	180,257	120,703	300,960	12
3,114	21	4,637,451	3,412	85	5,391,285	38,129,880	18,365,941	56,495,821	13
200	—	233,287	222	2	287,705	291,903	291,903	858,807	14
1,033	3	1,349,548	1,245	27	1,809,444	1,844,548	3,123,939	4,968,487	15
90	3	103,445	113	14	148,613	281,450	603,741	885,191	16
7,624	2,577	9,314,584	10,588	3,494	16,770,503	47,039,926	48,904,259	95,944,185	
1,463	56	1,786,926	1,779	101	2,437,844	5,885,803	9,085,195	14,970,998	1
462	11	236,487	506	21	352,124	643,917	893,732	1,587,649	2
377	169	502,844	420	171	587,650	1,329,824	1,378,518	2,708,342	3
137	106	202,814	231	178	421,590	869,608	1,843,286	2,712,894	4
11	—	10,774	24	5	55,476	53,368	159,855	213,223	5
198	91	250,237	232	101	330,399	915,571	878,824	1,794,395	6
7	2	9,465	19	4	32,286	72,646	69,791	142,437	7

10.—Statistics of the Numbers, Capital, Employees, Salaries and Wages, Cost of con

No.	Groups and Kinds of Industries.	Number of Establishments.	Capital Employed.	Salaried Employees.		
				Male.	Female.	Salaries.
		No.	\$	No.	No.	\$
GROUP 8.—CHEMICALS AND ALLIED PRODUCTS—concluded.						
8	Coal tar distillation.....	3	1,122,029	10	1	24,118
9	Disinfectants.....	5	115,048	7	6	22,852
10	Dyes and colours.....	6	409,780	22	6	67,979
11	Explosives.....	9	6,826,543	80	5	154,336
12	Fertilizer.....	17	3,935,467	77	17	148,214
13	Fireworks.....	4	147,417	11	2	38,884
14	Flavouring extracts.....	19	1,233,969	113	41	240,051
15	Gases, compressed.....	25	4,351,232	139	40	300,071
16	Inks, printing.....	12	1,521,956	68	16	294,547
17	Inks, writing.....	8	215,217	15	11	40,672
18	Insecticides.....	12	459,721	21	3	42,951
19	Matches.....	4	2,168,775	78	4	86,367
20	Medicinal and pharmaceutical preparations	109	13,995,461	536	274	1,517,488
21	Paints and varnishes.....	53	21,073,706	638	193	1,899,135
22	Polishes and dressings.....	31	1,521,563	122	30	251,345
23	Soaps.....	32	13,881,099	342	83	776,877
24	Sweeping compounds.....	4	74,779	12	1	34,915
25	Toilet preparations.....	23	1,625,485	61	31	174,602
26	Washing compounds.....	13	274,660	21	4	75,966
27	Wood distillation.....	11	3,241,389	33	3	45,708
28	All other industries.....	1	24,493	2	—	1,039
GROUP 9.—MISCELLANEOUS INDUSTRIES.						
	Total.....	1,404	615,921,239	4,735	1,436	9,491,155
1	Advertising and other novelties.....	8	84,290	10	6	25,313
2	Artificial feathers and flowers.....	6	303,624	25	7	52,608
3	Brooms, brushes and mops.....	71	3,546,516	183	68	445,758
4	Buttons.....	21	1,363,340	50	16	141,974
5	Candles and tapers.....	7	99,691	7	—	14,000
6	Electric light and power.....	905	568,068,752	3,456	998	6,382,340
7	Fountain pens.....	3	1,528,932	31	8	55,290
8	Ice, artificial.....	23	2,244,904	44	14	103,119
9	Jewel cases and silverware cabinets.....	6	185,845	16	1	23,289
10	Mattresses and springs.....	48	4,789,332	181	35	461,648
11	Musical instruments.....	68	13,776,790	251	84	668,493
12	Pipes, tobacco.....	4	55,772	3	—	6,243
13	Refrigerators.....	13	2,307,219	59	20	142,826
14	Regalia and society emblems.....	9	170,066	13	9	32,123
15	Scientific and professional equipment.....	24	9,799,138	169	90	360,012
16	Signs.....	110	1,660,530	—	—	—
17	Sporting and athletic goods.....	30	2,474,784	61	25	118,380
18	Statuary and art goods.....	16	304,314	25	8	54,645
19	Trunks and valises.....	14	1,958,458	65	27	181,081
20	Typewriters and supplies.....	5	409,969	29	5	73,952
21	Umbrellas and parasols.....	7	392,101	30	5	75,962
22	All other industries.....	6	396,872	27	10	72,219

4.—Capital Employed.

In a retrospective study of capital employed in Canadian manufactures since 1900, the remarkable increase denotes rapid growth in the industrial operations. From 1900 to 1905, the capital increased from \$446,900,000 to \$833,900,000, and advanced to \$1,958,700,000 in 1915. During this period returns were received from establishments with five hands and over, and while the rise of wholesale prices did not exceed 37 p.c., the capital employed in manufactures increased nearly 340 p.c.

The capital used during 1922 in all establishments, irrespective of the number of employees, was \$3,125,773,000, compared with \$3,052,818,000 in 1921, an increase of 2.4 p.c. Price levels were lower in 1922 than in 1921, but it should be remembered that a considerable part of the industrial capital of the country was inactive in 1921 and was consequently not included in the statistics collected.

Materials and Value of Products of Canadian Manufacturing Industries, 1922—cluded.

Wage Earners.			Total Employees.			Cost of Materials.	Value of Products.		No.
Male.	Female.	Wages.	Male.	Female.	Salaries and Wages.		Net.	Gross.	
No.	No.	\$	No.	No.	\$	\$	\$	\$	
51	—	53,503	61	1	77,621	269,146	523,777	792,923	8
13	3	9,553	20	9	32,405	44,195	49,240	93,435	9
20	24	30,186	42	30	98,165	227,581	303,888	531,469	10
409	4	498,059	459	9	652,395	6,076,366	1,886,859	7,963,225	11
248	2	200,665	325	19	348,879	1,098,230	883,188	1,981,418	12
21	13	28,290	32	15	67,174	68,535	124,558	193,093	13
49	66	77,072	162	107	317,123	832,732	597,361	1,430,093	14
130	—	179,446	269	40	479,517	280,666	1,627,603	1,908,269	15
179	—	197,474	247	16	492,021	703,942	1,192,663	1,896,605	16
30	24	37,861	45	35	78,533	138,764	189,168	327,932	17
71	5	47,302	92	8	90,253	293,911	242,363	536,274	18
462	442	637,311	540	446	723,678	1,419,015	1,604,983	2,923,998	19
645	846	1,235,192	1,181	1,120	2,752,680	4,145,298	7,387,378	11,532,536	20
1,421	199	1,522,082	2,059	392	3,421,217	11,354,903	8,875,642	20,230,545	21
80	58	119,594	202	88	370,939	736,517	933,776	1,670,293	22
774	249	975,539	1,116	332	1,752,416	7,534,457	5,597,815	13,132,290	23
7	—	8,094	19	1	43,009	42,087	65,904	107,991	24
59	190	164,621	120	221	339,223	945,534	1,409,753	2,355,287	25
43	17	47,711	64	21	123,677	124,625	229,703	354,328	26
255	—	242,104	288	3	287,812	932,276	960,635	1,892,911	27
2	—	3,378	4	—	4,417	391	8,941	9,332	28
13,718	1,882	17,402,454	18,453	3,318	26,893,609	16,548,635	107,810,197	124,358,832	
19	42	44,116	29	48	69,429	93,224	112,076	205,300	1
15	139	96,271	40	146	148,879	142,060	274,233	416,293	2
710	223	708,949	893	291	1,154,707	1,654,235	2,255,135	3,909,370	3
209	247	356,182	259	263	498,156	369,643	833,597	1,203,240	4
18	13	16,674	25	13	30,674	38,084	69,352	107,436	5
6,230	—	8,112,910	9,686	998	14,495,250	—	82,328,866	82,328,866	6
131	73	150,090	162	81	205,380	330,453	621,856	952,309	7
224	—	312,463	268	14	415,582	53,827	1,004,194	1,058,021	8
32	28	56,566	48	29	79,855	38,839	114,627	153,466	9
928	146	1,103,610	1,109	181	1,565,158	3,359,301	3,512,182	6,871,483	10
2,444	181	2,750,327	2,695	265	3,418,820	4,238,370	5,681,001	9,919,371	11
27	1	22,243	30	1	28,486	42,161	51,836	93,997	12
424	3	443,222	483	23	586,048	1,038,350	1,329,914	2,368,264	13
19	38	49,496	32	47	81,619	105,551	139,792	245,343	14
491	409	999,205	660	499	1,359,217	2,095,095	3,661,973	5,757,068	15
700	—	939,167	700	—	939,167	351,832	2,081,812	2,433,644	16
408	110	460,333	469	135	578,713	861,081	1,455,676	2,316,757	17
126	44	152,812	151	52	206,957	162,018	310,154	472,172	18
454	82	424,991	519	109	606,072	854,315	1,153,788	2,008,103	19
30	17	51,338	59	22	125,290	238,073	215,929	454,002	20
27	73	72,209	57	78	148,171	311,466	281,660	593,126	21
52	13	79,780	79	23	151,999	170,657	320,544	491,201	22

The provincial distribution of the manufactures of Canada is illustrated by the capital invested in the operation of the plants. Capital employed in Ontario during 1920 was 49.5 p.c. of the total, increasing to 51.1 p.c. in 1921 and 52.6 p.c. in 1922. The proportion of the total capital employed in the plants of Quebec was 30 p.c. in 1920, 30.4 p.c. in 1921 and 29.8 p.c. in 1922. British Columbia held third place, with a capital of 6.5 p.c. of the total in 1922, while Nova Scotia, New Brunswick and Manitoba followed in the order named, with proportions of between 2 p.c. and 4 p.c. each.

In a survey of the industrial groups in which the capital of the country is invested, it appears that the wood and paper group led in 1922, with an investment of 24.3 p.c. of the total. The iron and steel group was third, with 16.8 p.c. In 1921, the wood and paper group employed 25.4 p.c. and the iron and steel group 18.8 p.c. of the total capital. The proportion of the capital employed by the mis-

cellaneous group, including the electric power industry, increased from 17.4 p.c. in 1921 to 19.7 p.c. in 1922.

The statistics of capital employed in the manufacturing industries are of interest in deducing the proportions of fixed and liquid assets. In 1921, lands, buildings and machinery constituted 60 p.c. of the total capital, while in 1922 the proportion increased to 63 p.c. Fixed assets increased from \$1,831,000,000 to \$1,968,000,000, while quick assets, including the materials on hand, stock in process, cash and sundries, declined from \$1,199,000,000 to \$1,158,000,000. These results indicate that the value of real property utilized in manufactures continued to increase, while writing down of inventories and a decline of working capital were characteristic of the period.

11.—Capital Employed in the Manufacturing Industries of Canada, in Percentages, by Provinces, 1915, 1917-1922.

Provinces.	1915.	1917.	1918.	1919.	1920.	1921.	1922.
Prince Edward Island.....	.1	.1	.1	.1	.1	.1	.1
Nova Scotia.....	6.4	4.9	4.4	4.1	4.3	3.1	3.1
New Brunswick.....	2.3	2.4	2.4	2.8	3.2	3.2	2.6
Quebec.....	27.5	29.6	28.3	29.0	30.0	30.4	29.8
Ontario.....	48.0	47.9	49.7	49.0	49.5	51.1	52.6
Manitoba.....	4.8	3.6	3.5	3.4	3.4	2.9	2.7
Saskatchewan.....	.8	1.2	1.3	1.1	1.2	1.0	1.0
Alberta.....	2.1	2.3	2.0	2.1	1.8	1.6	1.6
British Columbia.....	8.0	7.9	8.1	8.3	6.5	6.6	6.5
Yukon.....	—	.1	.2	.1	—	—	—
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0

12.—Capital Employed in the Manufacturing Industries of Canada, by Industrial Groups, 1921 and 1922.

Industrial Groups.	1921.		1922.	
	Amount.	Percent-age.	Amount.	Percent-age.
Vegetable products.....	\$ 360,945,194	11.8	\$ 371,361,682	11.9
Animal products.....	200,697,527	6.6	201,829,414	6.4
Textile products.....	260,158,327	8.5	268,065,238	8.6
Wood and paper.....	775,207,859	25.4	761,188,396	24.3
Iron and its products.....	575,680,424	18.8	526,109,953	16.8
Non-ferrous metals.....	104,079,490	3.4	102,208,275	3.3
Non-metallic minerals.....	126,989,134	4.2	161,063,081	5.2
Chemicals and allied products.....	118,382,642	3.9	118,025,483	3.8
Miscellaneous industries.....	530,677,506	17.4	615,921,239	19.7
Total for Canada.....	3,052,818,103	100.0	3,125,772,761	100.0

NOTE.—A revision designed to place the statistics of 1921 on a comparable basis with those of 1922, accounts for the difference between the figures as previously published and as given here in Tables 11, 12 and 13.

13.—Capital Employed in the Manufacturing Industries of Canada, by Provinces and by Groups of Industries, 1921.

(A) By Provinces.

Description.	Number of establishments.	Fixed Capital.		Working Capital.		Total capital.
		Land, buildings and fixtures.	Machinery and tools.	Materials on hand, stocks in process and miscellaneous supplies.	Cash, trading and operating accounts and bills receivable.	
Canada.....	21,872	\$ 1,013,661,446	\$ 817,632,624	\$ 675,460,778	\$ 523,640,911	\$ 3,052,518,103
Prince Edward Island.....	339	616,865	820,766	453,449	333,702	2,308,216
Nova Scotia.....	1,186	41,733,795	25,200,210	15,672,556	12,917,586	95,874,749
New Brunswick.....	855	35,474,095	25,068,251	26,485,617	11,493,571	98,856,554
Quebec.....	7,126	323,216,709	238,132,901	203,079,517	158,002,593	927,111,817
Ontario.....	9,112	475,796,578	415,236,571	367,417,360	288,566,491	1,561,196,925
Manitoba.....	759	29,307,509	26,982,767	16,505,614	13,942,012	87,498,856
Saskatchewan.....	592	9,732,409	10,378,637	4,960,269	3,747,778	29,271,567
Alberta.....	689	17,680,574	15,486,190	7,768,000	8,783,797	50,306,658
British Columbia and Yukon.....	1,214	80,102,912	60,326,329	33,118,396	25,853,381	200,392,761

(B) By Industrial Groups.

Vegetable products.....	3,946	122,007,515	78,557,997	91,050,599	66,736,618	360,945,194
Animal products.....	5,051	56,455,522	32,902,430	63,591,106	47,748,469	200,697,527
Textile products.....	1,627	55,700,984	57,810,132	73,315,844	65,460,713	260,158,327
Wood and paper.....	7,152	269,693,940	202,893,117	188,346,020	103,621,022	775,207,859
Iron and its products.....	1,138	154,414,781	154,590,441	146,873,123	119,802,079	575,680,424
Non-ferrous metals.....	344	23,884,191	23,987,862	30,592,485	25,614,952	104,079,490
Non-metallic minerals.....	764	77,876,836	12,662,365	27,469,201	8,980,732	126,989,134
Chemicals and allied products.....	468	47,661,956	17,484,515	30,510,002	22,721,169	118,382,658
Miscellaneous industries.....	1,382	205,965,721	236,743,765	23,707,398	62,955,157	530,677,506

14.—Capital Employed in the Manufacturing Industries of Canada, by Provinces and by Groups of Industries, 1922.

(A) By Provinces.

Description.	Number of establishments.	Fixed Capital.		Working Capital.		Total capital.
		Land, buildings and fixtures.	Machinery and tools.	Materials on hand, stocks in process and miscellaneous supplies.	Cash, trading and operating accounts and bills receivable.	
Canada.....	22,184	\$ 1,156,973,691	\$ 810,672,427	\$ 623,723,342	\$ 534,403,301	\$ 3,125,772,761
Prince Edward Island.....	351	752,334	948,295	522,269	712,931	2,935,829
Nova Scotia.....	1,140	43,194,810	28,143,131	15,159,508	11,301,824	97,799,273
New Brunswick.....	885	28,937,678	16,627,761	21,467,898	14,756,597	81,789,934
Quebec.....	7,367	366,499,553	229,828,654	177,183,329	158,674,617	932,186,153
Ontario.....	9,174	582,086,073	420,767,463	343,453,806	296,880,590	1,643,187,941
Manitoba.....	768	27,535,947	29,053,502	14,516,992	13,555,937	84,662,378
Saskatchewan.....	606	10,841,143	10,687,092	5,458,861	3,281,048	30,268,144
Alberta.....	652	18,979,880	16,761,122	8,307,009	7,235,971	51,283,982
British Columbia and Yukon.....	1,241	78,146,273	57,855,407	37,653,670	28,003,777	201,659,127

(B) By Industrial Groups.

Vegetable products.....	4,355	124,662,994	84,162,512	90,034,693	72,501,483	371,361,682
Animal products.....	5,118	60,471,822	35,702,043	62,516,548	43,139,001	201,829,414
Textile products.....	1,709	60,432,077	66,404,740	73,656,835	67,571,586	268,065,238
Wood and paper.....	6,983	321,735,284	160,650,569	163,018,464	115,784,079	761,188,396
Iron and its products.....	1,040	134,443,377	154,742,535	125,371,316	111,552,725	526,109,953
Non-ferrous metals.....	325	26,973,740	24,689,187	28,213,775	22,331,573	102,208,275
Non-metallic minerals.....	781	103,982,988	16,602,502	29,505,338	10,972,253	161,063,081
Chemicals and allied products.....	469	46,896,159	17,563,321	27,605,509	25,960,944	118,025,483
Miscellaneous industries.....	1,404	277,375,250	250,155,018	23,800,864	64,590,107	615,921,239

5.—Employment.

The total number of persons engaged in the manufacturing industries of Canada in 1922 was 462,573, as compared with 439,889 in 1921 and 583,112 in 1920. The employees consisted in 1922 of 74,884 persons on salaries and 387,689 wage earners. This latter figure, representing the average number of wage earners employed during the entire year, was ascertained by dividing twelve into the sum of the numbers on the payrolls on the 15th of each month.

A comparison of the average number of wage earners is an excellent measure of industrial activity. In Table 15 index numbers, based on data for 1917 equalling 100, are given to show the variation in employment. The index numbers of the volume of products, obtained by dividing the index numbers of the gross value of production by the index numbers of wholesale prices, both series being referred to 1917 as a base, are also inserted for comparative purposes. Aside from the considerable drop in 1921, the indices of employment indicate less violent change than those of production. As compared with the record of the preceding year, the index of employment in 1922 increased 4 points, while the index of the volume of production increased 7.5 points. In 1922 the number of wage earners was 27 p.c. less than in 1917 and production was 13.7 p.c. less.

15.—Wage Earners in Manufacturing Industries, 1917-1922.

Years.	Average Number of Wage Earners. ¹	Index Numbers.	
		Average Number of Wage Earners.	Volume of Manufactured Products.
1917.....	531,466	100.0	100.0
1918.....	517,704	97.4	85.7
1919.....	499,557	94.0	81.5
1920.....	502,627	94.6	81.0
1921.....	366,694	69.0	78.8
1922.....	387,689	73.0	86.3

¹Exclusive of outside piece-workers.

Employment by Provinces.—The concentration of manufacturing establishments in the provinces of Ontario and Quebec is shown by the fact that in 1922 the employees in the former province were 58.9 p.c. and in the latter 31.3 p.c. of the total. The proportions in the other provinces were 5.7 p.c. in British Columbia, 3 p.c. in Manitoba and 2.9 p.c. in Nova Scotia, the employment in the remaining provinces ranging from 0.24 p.c. to slightly more than 3 p.c. The average employment throughout Canada of workers of all ranks, exclusive of outside piece-workers, was 439,889 in 1921, which increased by 5.0 p.c. to 462,573 in 1922.

Sex Distribution of Employees.—In Ontario the ratio of the number of female wage earners employed in factories to the number of males during 1915 was 22.7 p.c., while in 1922 the ratio increased to 30.4 p.c. In Quebec the ratio was 27.1 p.c. in 1915 and 37.6 p.c. in 1922. The more rapid increase of female employment was largely due to the special conditions arising out of the war. The employment of women was, however, largely confined to a few trades, the expansion of the textile and clothing industries being a chief cause of the increase in female employment. In addition, the preparation of food, book-binding and other light factory work were specifically regarded as women's trades. From 1921 to 1922, the male wage earners of Canada increased 3.5 p.c., while the female workers increased 11.1 p.c.

Earnings of Employees.—The total amount paid to the employees in industrial plants during 1922 was \$497,100,000, as compared with \$484,600,000 in 1917. The wage payments in 1922 were \$363,300,000, while the salaried employees received a remuneration of \$133,900,000. The average yearly wage of the wage earner was \$937 in 1922 as compared with \$748 in 1917, an increase of 25.2 p.c. in average earnings. When the index number representing the average yearly wages with 1917 as a base is divided by the index number of the cost of living with the same base, it is seen that real wages advanced by about 12 p.c. in the five-year interval. The details of the computation are given in Table 16.

16.—Average Yearly Earnings and Real Wages of Wage Earners in Manufacturing Industries, 1917-1922.

Years.	Amount of Wages paid.	Average Number of Wage Earners.	Average Yearly Earnings.	Index Numbers.		
				Average Yearly Earnings.	Retail Prices.	Real value of Average Yearly Earnings.
	\$		\$			
1917.....	397,738,544	531,466	748	100.0	100.0	100.0
1918.....	446,275,099	517,704	862	112.7	113.9	98.9
1919.....	461,431,773	499,557	924	123.5	125.5	98.4
1920.....	552,010,143	502,627	1,098	146.8	143.1	102.6
1921.....	365,276,146	366,694	996	133.1	120.4	110.5
1922.....	363,263,118	387,689	937	125.2	111.7	112.1

Summary statistics of the number of salaried and wage-earning employees of manufacturing industries, with the amount of salaries and wages paid in 1921 and 1922, are given by provinces in Tables 17 and 18, the statistics for 1921 having been revised for the purpose of comparability.

17.—Male and Female Employees on Salaries and Wages, by Provinces and Groups of Industries, 1921.

Provinces and Groups.	Employees on Salaries.		Salaries.	Employees on Wages.		Wages.
	Males.	Females.		Males.	Females.	
	No.	No.	\$	No.	No.	\$
(A) PROVINCES.						
Prince Edward Island.....	150	11	120,861	519	213	401,627
Nova Scotia.....	1,268	356	2,493,529	9,336	1,930	9,865,668
New Brunswick.....	1,213	289	2,426,954	8,425	2,325	8,104,071
Quebec.....	15,763	3,589	36,865,461	89,087	33,020	107,566,941
Ontario.....	31,583	9,621	74,002,551	143,008	38,784	192,669,377
Manitoba.....	2,531	671	5,965,141	8,538	2,342	13,098,578
Saskatchewan.....	893	151	1,703,873	2,860	272	3,875,241
Alberta.....	1,427	288	3,036,752	4,373	1,506	6,369,504
British Columbia and Yukon....	2,938	453	6,539,482	18,182	1,974	23,325,139
Total.....	57,766	15,429	133,154,604	284,328	82,366	365,276,146
(B) INDUSTRIAL GROUPS.						
Vegetable products.....	8,258	2,155	18,509,048	35,193	15,555	44,621,845
Animal products.....	8,744	1,610	15,722,980	27,139	8,233	32,401,687
Textile products.....	5,445	2,068	15,425,563	28,090	40,776	55,895,720
Wood and paper.....	13,104	3,467	31,976,579	86,752	7,999	99,113,282
Iron and its products.....	9,650	2,193	22,965,454	62,771	2,466	75,398,529
Non-ferrous metals.....	3,010	1,091	7,526,846	11,062	2,773	15,165,938
Non-metallic minerals.....	1,733	494	3,858,940	13,143	612	15,942,151
Chemicals and allied products....	2,326	902	7,084,639	6,619	2,224	9,107,818
Miscellaneous industries.....	4,996	1,449	10,084,555	13,559	1,728	17,629,176

18.—Male and Female Employees on Salaries and Wages, by Provinces and Groups of Industries, 1922.

Provinces and Groups.	Employees on Salaries.		Salaries.	Employees on Wages.		Wages.
	Male.	Female.		Male.	Female.	
	No.	No.	\$	No.	No.	\$
(A) PROVINCES.						
Prince Edward Island.....	175	26	152,832	636	282	472,368
Nova Scotia.....	1,206	355	2,183,393	9,780	2,239	9,386,430
New Brunswick.....	1,342	323	2,682,242	9,987	2,547	9,398,598
Quebec.....	16,552	3,713	37,743,338	88,656	36,028	103,258,899
Ontario.....	31,675	10,099	74,145,772	150,329	45,216	194,516,958
Manitoba.....	2,458	682	5,718,577	8,228	2,421	12,172,487
Saskatchewan.....	956	169	1,814,007	2,698	303	3,748,138
Alberta.....	1,465	321	3,053,175	4,239	976	5,896,730
British Columbia.....	2,876	487	6,350,165	20,685	2,433	24,390,613
Yukon.....	4	6,935	6	21,897
Total.....	58,709	16,175	133,850,436	295,244	92,445	363,263,118
(B) INDUSTRIAL GROUPS.						
Vegetable products.....	8,742	2,243	19,325,777	35,931	16,301	45,099,145
Animal products.....	8,758	1,719	15,627,177	30,277	8,841	34,306,502
Textile products.....	5,547	2,166	15,313,325	31,658	48,677	60,911,036
Wood and paper.....	13,713	3,762	33,190,715	92,551	8,436	98,894,199
Iron and its products.....	9,128	2,361	21,934,583	60,722	2,377	68,670,574
Non-ferrous metals.....	3,161	1,040	7,426,358	11,245	2,776	14,025,271
Non-metallic minerals.....	1,961	531	4,085,477	11,518	578	14,639,353
Chemicals and allied products.....	2,964	917	7,455,919	7,624	2,577	9,314,584
Miscellaneous industries.....	4,735	1,436	9,491,155	13,718	1,882	17,402,454

Days in Operation and Hours Worked.—Assuming that the year consisted of 304 working days, each plant on the average operated full time 220·6 days, and worked part time 10·4 days. The average day was 8·7 hours and the average week was 49·7 hours. The time in operation and the average number of hours worked are shown by provinces and industrial groups in Table 19. The number of piece-workers and their earnings are given in Table 20.

19.—Number of Days in Operation and of Hours Worked per Shift and per Week in the Manufactures of Canada, 1922.

Provinces and Groups.	Number of Estab-lishments.	Time in Operation—Number of Days.			Average Number of Hours Worked.	
		Full time.	Part time	Idle.	Per shift.	Per week.
PROVINCES.						
Prince Edward Island.....	351	42,170	1,261	6,480	8·9	52·1
Nova Scotia.....	1,140	200,720	5,765	18,831	8·9	52·7
New Brunswick.....	885	150,317	3,168	12,910	8·8	51·5
Quebec.....	7,367	1,462,455	58,458	105,105	8·9	51·9
Ontario.....	9,174	2,204,063	129,419	164,264	8·8	48·2
Manitoba.....	368	197,027	10,234	11,961	8·4	48·7
Saskatchewan.....	606	165,953	4,876	9,479	7·1	41·8
Alberta.....	652	170,229	7,039	11,114	8·4	48·8
British Columbia and Yukon.....	1,241	299,594	9,608	15,861	10·2	59·7
Total.....	22,184	4,892,528	229,828	356,005	8·7	49·7
INDUSTRIAL GROUPS.						
Vegetable products.....	4,355	1,018,763	63,493	125,812	9·1	52·9
Animal products.....	5,118	1,023,978	26,448	17,190	8·4	48·4
Textile products.....	1,709	451,079	26,639	26,553	8·7	48·7
Wood and paper.....	6,983	1,314,330	53,569	109,277	8·5	51·2
Iron and its products.....	1,040	272,832	25,760	18,238	9·4	50·0
Non-ferrous metals.....	325	84,874	8,294	4,367	8·3	45·1
Non-metallic minerals.....	781	150,297	14,491	32,210	8·6	51·5
Chemicals and allied products.....	469	114,785	3,186	12,717	8·4	48·6
Miscellaneous industries.....	1,404	461,590	7,948	9,641	8·8	51·0

20.—Number of Piece-workers and their Earnings, by Provinces and Industrial Groups, 1922.

Provinces and Groups.	Outside Piece-workers.			
	Male.	Earnings.	Female.	Earnings.
	No.	\$	No.	\$
PROVINCES.				
Prince Edward Island.....	—	—	—	—
Nova Scotia.....	11	6,526	29	2,849
New Brunswick.....	27	1,331	9	2,050
Quebec.....	310	261,254	1,691	219,292
Ontario.....	686	405,874	2,691	330,068
Manitoba.....	483	19,570	43	8,866
Saskatchewan.....	30	2,803	2	48
Alberta.....	16	10,465	4	132
British Columbia and Yukon.....	34	7,244	29	6,065
Total.....	1,597	715,067	4,498	569,370
INDUSTRIAL GROUPS.				
Vegetable products.....	150	18,031	844	42,003
Animal products.....	179	130,319	173	36,614
Textile products.....	194	457,070	2,659	432,191
Wood and paper.....	876	42,656	126	18,402
Iron and its products.....	16	4,817	1	30
Non-ferrous metals.....	49	17,435	3	487
Non-metallic minerals.....	45	18,237	547	13,275
Chemicals and allied products.....	28	9,006	5	413
Miscellaneous industries.....	60	17,496	140	25,955

6.—Power and Fuel.

Power.—The statistics of the use of mechanical power in manufacturing establishments bring into relief another phase of industrial development in Canada. The total h.p. used has been computed for the years 1921 and 1922. The power produced by steam and internal combustion engines, by water wheels and motors and other unspecified units, as well as the electric power generated in the establishment and purchased from outside concerns, was included in the total. On account of the recovery in manufacturing activity during 1922, the power used increased to 4,774,511 h.p., as compared with 4,181,969 h.p. in the preceding year. The power developed by electric motors in 1922 was 1,162,649 h.p., as compared with 1,014,216 h.p. in 1921.

The total h.p. used in the factories of Ontario in 1922 was 2,056,018, Quebec following with 1,663,801 h.p. Third came British Columbia, with a h.p. of 477,386. The total electrical power used in Ontario was 580,913 h.p., and in Quebec 402,319. Aside from the miscellaneous group, which includes the central electric stations, the wood and paper group used most power in 1922. This group used 1,282,695 h.p., which may be compared with 339,200 h.p., used by the iron and steel products group. The vegetable products group, including the flour-milling industry, held fourth place, using 274,822 h.p.

21.—Power used in the Manufacturing Industries of Canada, by Provinces and Groups of Industries, 1921 and 1922.

Provinces and Groups.	Steam Engines and Tur- bines.	Gas Engines.	Oil and Gasoline Engines.	Hy- draulic Turbines and Water Wheels.	Electric Motors.	Other Power.	Total.
1921. ¹	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.
PROVINCES.							
Prince Edward Island.....	1,451	14	1,673	1,920	173	44	5,275
Nova Scotia.....	48,273	2,170	3,017	25,826	22,070	975	102,331
New Brunswick.....	57,893	541	2,650	20,157	34,578	351	116,170
Quebec.....	164,048	1,217	4,543	876,198	339,511	6,161	1,391,678
Ontario.....	249,443	15,308	4,984	1,011,346	495,721	19,268	1,796,070
Manitoba.....	21,666	102	1,756	82,747	24,096	739	131,106
Saskatchewan.....	51,604	59	7,865	2	6,924	75	66,529
Alberta.....	58,560	1,141	2,355	32,444	13,117	26	107,643
British Columbia and Yukon.....	111,787	274	3,898	268,225	78,026	2,957	465,167
Total.....	764,725	20,826	32,741	2,318,865	1,014,216	30,596	4,181,969
INDUSTRIAL GROUPS.							
Vegetable products.....	52,941	2,121	3,959	47,325	147,862	3,028	257,236
Animal products.....	23,847	494	3,490	1,578	50,501	800	80,710
Textile products.....	21,652	1,127	215	26,383	77,762	1,168	128,307
Wood and paper.....	318,752	5,837	5,851	402,397	390,757	17,887	1,141,481
Iron and its products.....	37,149	9,965	699	4,440	203,207	3,359	263,819
Non-ferrous metals.....	6,617	8	31	2,525	41,826	1,381	52,388
Non-metallic minerals.....	15,941	1,243	1,703	10	28,942	2,742	50,581
Chemicals and allied products.....	13,511	25	864	7,850	55,707	146	78,103
Miscellaneous industries.....	274,315	6	15,929	1,826,357	12,652	85	2,129,344
1922.							
PROVINCES.							
Prince Edward Island.....	1,754	17	1,350	1,703	243	—	5,067
Nova Scotia.....	65,238	414	3,318	38,888	25,471	—	133,329
New Brunswick.....	60,679	1,823	2,403	21,858	26,060	—	112,823
Quebec.....	180,103	4,418	13,052	1,063,909	402,319	—	1,663,801
Ontario.....	283,698	34,307	4,713	1,152,387	580,913	—	2,056,018
Manitoba.....	23,914	761	1,484	89,630	26,169	—	142,008
Saskatchewan.....	49,855	146	8,258	44	7,711	—	66,015
Alberta.....	66,596	1,921	2,439	32,599	14,509	—	118,064
British Columbia and Yukon.....	101,918	2,051	4,147	290,016	79,254	—	477,386
Total.....	833,756	45,858	41,164	2,691,084	1,162,649	—	4,774,511
INDUSTRIAL GROUPS.							
Vegetable products.....	59,763	5,491	4,579	47,819	157,170	—	274,822
Animal products.....	26,290	1,711	2,795	1,722	57,418	—	89,936
Textile products.....	23,373	995	221	17,295	89,068	—	130,952
Wood and paper.....	325,027	10,035	14,731	443,573	489,329	—	1,282,695
Iron and its products.....	81,415	26,265	432	5,979	225,109	—	339,200
Non-ferrous metals.....	6,837	133	27	55,455	49,250	—	111,702
Non-metallic minerals.....	11,910	1,022	1,508	80	34,450	—	48,970
Chemicals and allied products.....	14,421	169	61	6,810	41,580	—	63,041
Miscellaneous industries.....	284,720	37	16,810	2,112,351	19,275	—	2,433,193

¹ The statistics of power used during 1921, as published in the 1922-23 edition of the Year Book, have been revised to include additional data, and to effect comparability with the figures of 1922.

Fuel.—The fuel used in industrial establishments in 1922 included 4,101,463 tons of bituminous coal, valued at \$29,915,000, constituting 61.1 p.c. of the total fuel cost. The other chief fuels in order of value were fuel oil, comprising 11.5 p.c., anthracite coal 7.3 p.c. and coke 6.7 p.c. Out of a fuel account of over \$48,900,000, Ontario expended \$22,700,000 or 46 p.c. of the total. The manufacturing concerns of Quebec expended \$14,000,000 and those of Nova Scotia \$3,300,000.

The groups of industry in which fuel was most extensively used in 1922 were wood and paper, \$15,445,000, iron and steel, \$7,664,000, vegetable products, \$7,453,000 and non-metallic minerals \$5,873,000. Fuel is used quite generally throughout

the industrial field for the generation of power by means of internal-combustion and steam engines. The principal industries where fuel is used as a material that enters into the actual composition of the product, are the manufactures of coke and gas. The most important industries where heat is applied directly to materials to transform them or to facilitate their manipulation are foundries and machine shops, blast-furnaces and steel mills, non-ferrous metal smelting, brick and tile, lime and cement-making, petroleum-refining and the glass industry.

22.—Fuel used in the Manufacturing Industries of Canada, by Provinces and Groups, 1921 and 1922.

Provinces and Groups.	Bituminous Coal.		Anthracite Coal.	Lignite Coal.	Coke.	Gasoline.	Oil.	Total. ¹
1921. ²	Tons.	\$	\$	\$	\$	\$	\$	\$
PROVINCES.								
Prince Edward Island....	5,051	52,542	9,831	2,566	510	7,419	912	89,613
Nova Scotia.....	417,321	2,013,480	92,433	7,831	236,283	35,647	956,703	3,395,637
New Brunswick.....	237,147	1,957,610	53,101	2,558	13,311	13,579	24,131	2,158,467
Quebec.....	1,025,507	10,835,046	1,335,676	84,593	532,951	177,289	1,453,832	15,434,464
Ontario.....	2,025,489	17,835,545	1,121,398	63,054	1,474,306	294,631	1,913,041	23,956,861
Manitoba.....	64,586	585,526	121,458	201,214	123,547	39,503	56,199	1,254,884
Saskatchewan.....	49,724	416,430	75,016	579,540	13,029	60,430	69,594	1,680,471
Alberta.....	120,105	386,841	59,670	375,087	26,089	41,821	482	943,458
British Columbia and Yukon.....	158,141	1,171,661	47,169	10,013	77,374	59,622	942,906	2,727,057
Total	4,103,071	34,752,681	2,915,752	1,326,456	2,497,400	729,941	5,417,800	51,640,912
GROUPS.								
Vegetable products.....	559,279	4,634,807	893,686	238,244	346,538	106,761	572,532	7,455,321
Animal products.....	302,168	2,354,006	260,330	157,636	36,105	156,892	71,635	3,760,990
Textile products.....	282,265	2,765,296	235,097	46,021	51,755	16,241	11,912	3,185,176
Wood and paper.....	1,295,814	12,467,581	763,121	33,412	21,537	132,554	405,842	14,870,515
Iron and its products.....	830,006	5,835,331	338,315	50,990	1,400,717	122,390	1,306,487	9,621,669
Non-ferrous metals.....	73,913	642,713	92,556	5,616	82,678	44,049	139,962	1,113,970
Non-metallic minerals.....	255,894	2,307,018	41,320	4,612	437,724	49,527	2,699,194	6,183,707
Chemicals and allied products.....	189,568	1,642,952	98,304	27,584	115,698	20,034	62,854	2,030,889
Miscellaneous industries.....	314,164	2,102,977	193,023	762,441	4,648	81,493	147,382	3,418,675
1922.								
PROVINCES.								
Prince Edward Island....	3,790	40,670	40,371	—	1,450	4,661	809	106,979
Nova Scotia.....	203,127	762,580	392,895	479	896,468	23,274	1,053,920	3,327,075
New Brunswick.....	243,133	1,745,603	273,753	1,085	19,744	20,285	21,836	2,195,175
Quebec.....	1,145,002	9,138,039	1,236,116	42,433	566,408	141,388	1,598,778	14,259,642
Ontario.....	2,028,291	15,936,240	1,323,611	47,159	1,546,492	307,134	1,471,951	22,687,123
Manitoba.....	60,548	437,270	237,320	117,589	119,604	32,836	49,956	1,123,265
Saskatchewan.....	13,617	114,636	11,039	813,892	8,328	61,282	619,368	1,739,584
Alberta.....	243,069	637,368	19,837	97,149	21,681	35,169	4,199	898,351
British Columbia and Yukon.....	160,886	1,102,179	81,243	7,177	118,851	80,812	828,254	2,583,311
Total	4,101,463	29,914,585	3,616,185	1,126,963	3,299,016	706,841	5,649,071	48,920,505
GROUPS.								
Vegetable products.....	612,375	4,499,960	662,434	272,238	431,126	91,706	683,347	7,452,987
Animal products.....	330,959	2,258,929	211,730	111,456	29,889	185,009	49,016	3,539,108
Textile products.....	311,986	2,493,023	184,754	37,892	32,879	14,603	9,747	2,887,769
Wood and paper.....	1,518,272	12,375,108	855,498	17,652	29,505	106,092	596,054	15,445,158
Iron and its products.....	551,428	3,584,052	293,948	30,030	2,196,970	156,531	1,022,771	7,664,478
Non-ferrous metals.....	81,277	635,955	83,453	4,146	82,991	23,245	160,980	1,148,641
Non-metallic minerals.....	259,210	1,769,087	34,684	6,675	358,290	31,971	2,909,002	5,873,372
Chemicals and allied products.....	207,524	1,541,787	52,597	7,433	122,802	13,675	28,059	1,828,673
Miscellaneous industries.....	228,432	755,964	1,237,087	639,441	14,564	84,009	190,095	3,080,319

¹ Includes other varieties of fuel to the total value of \$4,000,882 in 1921 and \$4,607,844 in 1922.

² The statistics of fuel used in 1921 as published in the 1922-23 Year Book were revised to effect comparability with the figures of 1922.

7.—Localization of Manufacturing Industries.

The prosperity of most of the cities and large towns of Canada is intimately connected with their manufacturing industries. Statistics of the manufacturing industries in all cities, towns and villages of over 1,000 population throughout the country, as in 1921 and 1922, are given in Table 23. As a consequence of the gradual recovery from the post-war depression, the figures for 1922 in many cases show considerable increases over those of 1921, as in the cases of Toronto, Ottawa, London and Dartmouth. Cities having a gross manufacturing production of over \$100,000,000 each in 1922, in the order of the value of their products, were Montreal, Toronto and Hamilton. Winnipeg and Vancouver, the only cities in the \$50,000,000 to \$100,000,000 class in 1922, produced manufactures to the gross value of \$66,925,000 and \$63,173,000 respectively. Other important manufacturing cities producing goods to a gross value of between \$20,000,000 and \$50,000,000 in 1922 were, in the order of value of products, Ottawa, Oshawa, London, Kitchener, Quebec, St. John, Walkerville, Peterborough, Brantford, Sarnia, Sault Ste. Marie and Dartmouth. For details the reader is referred to Table 23.

23.—Statistics of Manufactures by Cities, Towns and Villages of 1,000 population and over, 1921 and 1922.

Cities and Towns.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Value of products.
	No.	\$	No.	\$	\$	\$
Prince Edward Island—						
Charlottetown.....	1921 24	1,234,977	327	272,309	1,153,333	1,839,810
	1922 34	1,759,272	383	313,526	923,787	1,739,329
Summerside.....	1921 14	189,754	48	34,557	82,997	159,040
	1922 13	214,677	76	41,045	87,263	197,602
Nova Scotia—						
Amherst.....	1921 22	7,247,208	1,154	959,855	999,328	4,094,846
	1922 28	6,803,119	776	737,924	1,255,593	2,587,308
Annapolis Royal.....	1921 5	106,065	42	31,405	55,669	109,203
	1922 7	106,358	35	28,136	75,739	138,582
Antigonish.....	1921 7	91,675	32	24,375	60,118	117,377
	1922 6	97,773	28	24,926	50,745	100,868
Bridgetown.....	1921 8	338,451	74	60,831	82,190	199,321
	1922 14	343,003	137	97,431	117,717	278,052
Bridgewater.....	1921 14	699,249	98	132,605	346,742	834,888
	1922 13	670,173	77	51,669	367,923	487,284
Canso.....	1921 11	522,466	135	105,494	245,217	445,099
	1922 9	402,719	210	103,910	308,267	584,977
Clark's Harbour.....	1921 9	62,987	64	32,921	162,756	265,128
	1922 7	36,426	85	18,407	144,892	198,821
Dartmouth.....	1921 16	19,169,930	1,593	2,204,095	10,936,890	17,078,996
	1922 18	22,720,844	1,458	1,796,870	14,541,169	21,021,421
Digby.....	1921 5	182,640	62	39,272	101,150	190,599
	1922 7	233,915	94	50,097	184,556	288,444
Glace Bay.....	1921 9	212,567	55	62,852	44,194	188,005
	1922 9	284,080	66	83,087	62,485	247,427
Halifax.....	1921 98	9,816,321	2,444	2,430,132	3,438,121	9,309,850
	1922 96	12,198,324	2,548	2,406,787	3,228,037	9,120,745
Kentville.....	1921 11	138,441	53	44,486	28,074	118,329
	1922 11	135,204	36	34,472	30,384	109,997
Liverpool.....	1921 11	3,250,306	129	80,391	172,776	343,209
	1922 11	3,288,193	188	121,152	307,689	763,038
Lockeport.....	1921 4	517,103	108	69,489	220,998	438,313
	1922 4	537,621	130	61,918	157,660	267,203
Louisburg.....	1921 4	17,043	1	500	21,195	33,900
	1922 5	51,422	10	3,277	43,001	56,848
Lunenburg.....	1921 11	246,520	72	54,640	87,685	181,370
	1922 13	343,973	128	88,896	92,622	250,209
Mahone Bay.....	1921 9	61,972	26	14,251	18,986	66,514
	1922 11	66,056	22	9,694	26,638	61,929
Middleton.....	1921 6	76,690	24	13,499	10,659	40,386
	1922 7	164,347	36	34,206	58,044	115,985
New Glasgow.....	1921 20	5,230,424	794	684,631	2,091,982	3,157,669
	1922 21	1,169,408	478	517,583	523,668	1,194,094

23.—Statistics of Manufactures by Cities, Towns and Villages of 1,000 population and over, 1921 and 1922—continued.

Cities and Towns.	Estab-lish-ments.	Capital.	Em-ployees.	Salaries and wages.	Cost of materials.	Value of products.
	No.	\$	No.	\$	\$	\$
Nova Scotia—concluded.						
North Sydney.....	1921 6	113,056	59	52,084	41,129	106,783
	1922 10	157,941	113	56,787	69,595	152,225
Oxford.....	1921 6	159,347	49	44,501	71,265	148,673
	1922 10	227,101	59	36,920	80,552	168,409
Parrsboro.....	1921 7	121,307	27	10,366	53,762	98,350
	1922 5	89,532	23	10,536	33,270	62,922
Pictou.....	1921 8	370,648	206	116,323	207,889	434,430
	1922 9	330,866	149	98,341	172,375	355,142
Port Hawkesbury.....	1921 6	412,392	76	62,090	235,832	534,780
	1922 7	713,798	166	77,629	312,970	462,558
Shelburne.....	1921 8	125,032	23	17,558	30,837	75,208
	1922 10	151,615	33	24,761	42,378	96,626
Springhill.....	1921 3	61,924	14	14,721	17,827	57,174
	1922 3	57,776	23	18,342	1,275	35,662
Stellarton.....	1921 6	443,940	39	37,923	76,979	246,327
	1922 5	449,445	40	39,169	63,891	258,038
Sydney.....	1921 27	20,448,268	1,032	1,440,414	8,415,986	13,666,231
	1922 28	27,497,282	1,863	2,955,630	8,118,944	12,497,273
Sydney Mines.....	1921 6	116,376	17	15,403	52,993	91,707
	1922 6	112,416	14	11,024	30,963	75,060
Truro.....	1921 16	3,109,195	543	386,784	1,178,131	2,467,808
	1922 20	3,335,713	724	730,721	1,323,132	2,727,687
Westville.....	1921 3	18,265	13	9,328	15,530	29,755
	1922 5	13,577	10	7,232	6,366	20,775
Windsor.....	1921 15	1,732,674	200	181,653	534,477	936,721
	1922 14	1,579,495	259	193,577	262,669	616,867
Wolfville.....	1921 5	74,367	18	12,707	77,399	120,259
	1922 6	100,143	25	21,054	97,904	166,105
Yarmouth.....	1921 31	3,435,067	581	469,624	891,881	1,983,208
	1922 30	3,396,341	731	526,202	1,280,604	2,259,534
New Brunswick—						
Bathurst.....	1921 9	9,603,407	405	353,431	687,607	1,261,418
	1922 16	12,527,181	639	426,729	851,637	1,539,964
Campbellton.....	1921 10	5,231,669	334	308,886	592,118	1,325,935
	1922 16	4,541,522	720	594,844	1,325,862	2,307,026
Chatham.....	1921 12	1,954,621	186	97,365	277,496	537,633
	1922 14	2,317,582	378	301,451	347,303	740,440
Dalhousie.....	1921 4	2,517,188	130	116,547	248,669	512,386
	1922 4	990,048	116	71,215	211,102	383,728
Edmundston.....	1921 8	10,823,561	357	426,132	1,018,974	2,370,454
	1922 7	4,544,871	374	406,700	1,495,106	2,752,249
Fredericton.....	1921 24	3,643,446	482	459,074	967,489	2,047,660
	1922 25	2,706,807	486	467,090	849,849	1,774,203
Grand Falls.....	1921 6	463,969	137	124,686	177,600	359,954
	1922 8	505,918	172	120,950	266,397	446,791
Hartland.....	1921 3	318,311	35	31,270	20,224	117,649
	1922 5	298,334	53	71,677	66,691	135,518
Moncton.....	1921 32	2,742,992	769	678,627	936,242	2,508,775
	1922 40	2,738,300	851	723,243	1,140,456	2,606,182
Newcastle.....	1921 10	4,102,534	191	148,449	457,127	762,542
	1922 15	4,703,769	325	211,108	847,043	1,257,644
Richibucto.....	1921 5	117,211	20	13,400	38,526	63,942
	1922 7	107,955	103	7,769	46,996	71,029
Sackville.....	1921 7	416,900	215	150,559	148,526	427,117
	1922 13	954,081	256	234,013	275,402	734,243
St. Andrews.....	1921 7	45,186	19	10,623	42,278	82,851
	1922 8	80,690	44	15,748	55,019	97,214
St. George.....	1921 4	722,153	135	119,583	103,920	318,124
	1922 6	855,982	144	151,353	156,396	454,171
St. John.....	1921 121	26,968,189	3,479	3,527,058	17,922,084	24,440,588
	1922 128	26,732,734	3,487	3,527,100	19,790,960	27,927,086
St. Leonard.....	1921 3	9,615	8	1,685	13,163	24,359
	1922 4	10,064	10	2,596	10,572	18,916
St. Stephen.....	1921 18	2,580,396	710	675,766	1,179,378	2,168,715
	1922 20	3,640,578	759	734,181	2,273,223	3,914,450
Shediac.....	1921 5	119,790	18	13,251	27,455	76,050
	1922 4	60,379	25	11,425	16,439	42,433
Sussex.....	1921 15	1,456,435	192	160,160	376,037	787,429
	1922 14	440,371	107	126,244	279,816	519,119
Woodstock.....	1921 12	425,631	88	76,182	118,144	269,122
	1922 15	432,126	104	92,856	107,877	276,072

23.—Statistics of Manufactures by Cities, Towns and Villages of 1,000 population and over, 1921 and 1922—continued.

Cities and Towns.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Value of products.
	No.	\$	No.	\$	\$	\$
Quebec—						
Actonvale.....	1921	8	95,792	27	14,583	72,300
	1922	9	96,366	47	26,353	65,641
Arthabaska.....	1921	6	152,087	60	42,623	84,982
	1922	8	179,200	80	46,330	95,563
Asbestos.....	1921	5	24,826	6	4,493	15,021
	1922	3	9,352	3	2,600	7,575
Bagotville.....	1921	7	51,080	12	9,946	15,280
	1922	5	37,050	8	5,741	24,114
Baie St. Paul.....	1921	16	611,779	33	19,506	44,569
	1922	14	90,671	14	7,872	21,333
Beauceville.....	1921	6	34,450	10	6,330	12,764
	1922	6	92,675	19	18,890	32,462
Beauharnois.....	1921	7	2,306,317	373	352,830	732,684
	1922	7	2,485,802	385	447,814	841,898
Bedford.....	1921	7	1,049,834	176	138,238	60,375
	1922	9	845,212	193	139,588	85,644
Belœil.....	1921	7	1,448,051	157	215,069	932,336
	1922	7	1,865,252	228	295,035	948,563
Berthier.....	1921	8	448,524	79	70,942	71,089
	1922	6	1,413,458	228	209,873	535,174
Black Lake.....	1921	3	28,160	7	6,023	10,470
	1922	3	29,800	6	4,210	11,272
Bromptonville.....	1921	6	401,806	69	96,772	280,425
	1922	3	4,620,806	254	185,612	671,807
Buckingham.....	1921	14	2,927,863	330	317,018	754,416
	1922	14	2,613,625	383	355,496	875,272
Chicoutimi.....	1921	24	9,519,014	832	946,075	979,641
	1922	13	5,561,867	689	710,636	1,368,712
Coaticook.....	1921	22	2,076,142	456	412,543	700,955
	1922	22	1,873,570	585	404,585	898,033
Cookshire.....	1921	9	458,545	61	62,830	116,704
	1922	8	421,593	34	38,546	72,147
Cowansville.....	1921	8	603,301	185	164,172	197,522
	1922	9	774,258	255	220,667	292,706
Danville.....	1921	8	53,412	10	6,425	7,626
	1922	10	1,841,176	103	103,648	164,466
Deschailions.....	1921	3	75,388	25	15,781	10,391
	1922	6	25,588	24	4,986	18,647
Disraeli.....	1921	7	685,835	79	75,662	102,863
	1922	6	686,036	54	56,457	67,227
Drummondville.....	1921	14	4,203,802	427	377,741	926,644
	1922	12	4,483,844	628	523,311	1,845,702
Farnham.....	1921	10	640,737	236	131,948	228,638
	1922	13	678,617	295	152,424	402,881
Fraserville.....	1921	12	1,583,058	156	111,123	116,681
	1922	17	781,031	135	101,139	88,668
Granby.....	1921	16	4,244,974	1,484	1,043,066	1,095,578
	1922	21	4,390,430	1,454	1,195,879	1,487,615
Grande Baie.....	1921	3	17,900	5	3,225	7,535
	1922	4	26,120	5	2,500	6,875
Grand'Mère.....	1921	11	41,044,663	1,749	2,760,624	4,464,868
	1922	12	51,297,487	1,778	2,014,287	2,389,202
Hull.....	1921	24	13,246,727	2,251	2,311,472	5,734,054
	1922	28	11,942,967	2,837	2,447,933	5,118,344
Huntingdon.....	1921	10	251,161	85	60,888	143,195
	1922	9	144,536	34	30,575	115,594
Iberville.....	1921	10	321,381	91	79,327	114,840
	1922	11	424,791	145	130,331	224,035
Joliette.....	1921	28	1,427,404	585	410,040	1,100,504
	1922	28	2,223,200	732	443,097	1,028,974
Jonquière.....	1921	14	2,011,210	218	284,490	456,063
	1922	9	1,690,190	230	263,438	455,763
Lachute.....	1921	13	3,178,022	339	281,241	631,575
	1922	13	3,284,916	352	309,938	579,729
Lachine.....	1921	19	7,633,906	841	1,054,109	1,625,555
	1922	23	8,398,513	1,015	1,207,969	1,365,116
Laprairie.....	1921	4	35,250	4	2,345	3,364
	1922	3	31,528	5	2,464	922
L'Assomption.....	1921	5	122,068	26	10,574	22,226
	1922	6	132,603	31	25,120	62,907
La Tuque.....	1921	7	8,465,846	783	993,888	1,387,847
	1922	8	8,277,669	709	1,008,797	1,694,918
Lauzon.....	1921	3	970,789	84	60,701	41,534
	1922	3	1,040,905	97	68,794	47,571

23.—Statistics of Manufactures by Cities, Towns and Villages of 1,000 population and over, 1921 and 1922—continued.

Cities and Towns.	Estab-lish-ments.	Capital.	Em-ployees.	Salaries and wages.	Cost of materials.	Value of products.
	No.	\$	No.	\$	\$	\$
Quebec—con.						
Lennoxville.....	1921 5	158,446	42	53,809	82,847	187,985
	1922 5	171,545	56	51,057	64,820	193,892
Lévis.....	1921 12	561,948	145	111,923	113,958	332,545
	1922 15	642,402	137	112,173	108,782	366,075
Longueuil.....	1921 3	47,219	17	15,484	32,385	62,114
	1922 4	35,952	12	11,100	24,941	44,481
Loretteville.....	1921 22	1,239,715	862	244,832	522,797	897,855
	1922 26	797,184	363	199,676	306,421	656,199
Louiseville.....	1921 12	1,078,368	369	261,707	705,961	1,158,747
	1922 9	787,630	247	211,931	328,044	617,807
Magog.....	1921 13	4,632,550	1,307	1,025,454	4,901,778	7,039,807
	1922 16	5,685,744	1,587	976,609	5,562,682	8,999,790
Marieville.....	1921 13	927,780	365	255,819	490,593	1,030,817
	1922 9	963,799	274	274,289	675,400	1,191,273
Mégantic.....	1921 4	358,839	44	65,522	21,134	173,477
	1922 5	232,567	36	43,982	31,876	101,489
Mont Joli.....	1921 8	475,847	67	53,549	154,263	280,729
	1922 7	261,413	67	53,711	56,012	154,873
Mont Laurier.....	1921 9	260,300	97	73,569	111,220	261,121
	1922 9	229,332	46	24,638	76,454	119,904
Montmagny.....	1921 14	2,496,337	235	205,840	379,363	1,012,729
	1922 13	1,450,983	64	42,085	38,664	146,698
Montreal.....	1921 1,326	437,159,896	74,320	81,709,683	212,796,716	413,475,166
	1922 1,468	456,898,909	79,996	83,973,965	200,918,219	406,846,230
Nicolet.....	1921 14	144,011	56	41,642	35,867	181,950
	1922 10	139,755	48	32,248	60,616	107,203
Pierreville.....	1921 10	24,750	14	6,432	17,269	81,634
	1922 10	43,826	24	14,468	50,771	94,485
Plessisville.....	1921 10	1,293,862	237	222,517	506,786	1,057,634
	1922 14	1,182,220	232	160,659	403,856	810,405
Quebec.....	1921 244	32,492,551	9,033	11,913,975	14,864,456	29,569,845
	1922 229	33,232,439	8,922	7,135,407	13,357,023	28,470,352
Richmond.....	1921 4	247,498	56	33,128	27,429	91,961
	1922 5	205,230	40	42,039	30,242	103,604
Rimouski.....	1921 13	1,946,397	314	178,670	350,320	726,820
	1922 11	1,373,958	210	178,274	246,317	559,098
Roberval.....	1921 14	171,913	59	34,277	63,439	125,689
	1922 19	279,407	72	52,546	96,018	236,383
Shawinigan Falls.....	1921 21	32,481,758	2,018	2,211,453	4,626,100	11,541,526
	1922 26	17,839,600	1,767	2,185,863	5,247,476	12,171,429
Sherbrooke.....	1921 61	18,905,118	3,447	3,267,650	3,898,448	11,236,117
	1922 58	20,463,578	2,899	2,953,200	5,363,893	13,339,473
Sorel.....	1921 21	1,625,810	529	188,643	390,995	869,117
	1922 13	1,112,179	288	208,236	270,878	622,209
Ste. Agathe des Monts.....	1921 9	540,756	116	120,051	201,260	439,362
	1922 5	312,749	76	67,259	199,611	337,109
Ste. Anne de Bellevue.....	1921 5	76,262	14	11,282	8,991	58,088
	1922 4	54,838	13	11,305	11,630	60,699
St. Eustache.....	1921 8	34,367	8	2,909	37,509	64,769
	1922 8	30,106	12	4,842	41,793	94,222
St. Gabriel de Brandon.....	1921 10	98,700	61	47,841	109,558	217,842
	1922 12	97,053	69	62,709	142,461	310,697
St. George.....	1921 6	52,570	10	5,125	8,916	17,835
	1922 6	276,850	35	25,342	47,571	148,929
St. Hyacinthe.....	1921 46	7,049,449	2,124	1,498,672	3,767,727	7,135,741
	1922 39	6,333,546	1,724	1,298,127	2,688,724	4,705,745
St. Jean.....	1921 23	6,137,886	1,903	1,675,854	2,670,907	5,519,780
	1922 23	5,852,928	1,916	1,612,516	1,918,472	4,630,362
St. Jérôme.....	1921 22	3,798,593	1,247	951,444	1,520,084	4,125,531
	1922 25	6,197,898	990	1,253,629	1,278,187	2,880,309
St. Joseph (Beauce Co.).....	1921 10	21,685	12	4,285	21,599	42,024
	1922 16	109,750	41	16,162	8,756	74,798
St. Lambert.....	1921 11	1,758,028	295	274,778	435,440	1,067,616
	1922 11	1,661,855	413	414,543	512,453	1,241,439
St. Laurent.....	1921 6	1,062,094	317	373,690	312,893	870,440
	1922 5	857,519	292	347,616	349,583	747,790
St. Raymond.....	1921 16	2,002,043	185	160,196	325,864	838,933
	1922 18	2,246,780	204	210,373	373,353	1,062,774
St. Rémi.....	1921 14	506,623	118	85,170	631,505	982,461
	1922 10	551,148	89	86,213	571,124	951,094
Ste. Thérèse.....	1921 14	876,098	202	169,526	366,288	683,851
	1922 12	848,417	226	161,334	356,290	620,864
St. Tite.....	1921 10	266,566	119	70,803	129,973	216,816
	1922 15	243,007	97	49,565	117,992	239,090

23.—Statistics of Manufactures by Cities, Towns and Villages of 1,000 population and over, 1921 and 1922—continued.

Cities and Towns.	Estab-lish-ments.	Capital.	Em-ployees.	Salaries and wages.	Cost of materials.	Value of products.
	No.	\$	No.	\$	\$	\$
Quebec—concluded.						
Terrebonne.....1921	10	1,456,967	254	213,834	226,530	528,549
1922	12	1,512,889	383	283,320	318,668	777,145
Thetford Mines.....1921	12	318,105	94	72,980	99,089	240,821
1922	13	373,431	113	122,415	108,845	530,055
Three Rivers.....1921	44	44,665,790	4,160	4,124,347	7,303,303	19,315,504
1922	51	40,161,468	3,884	3,719,817	7,860,571	15,955,894
Valleyfield.....1921	20	11,404,107	2,551	1,806,415	3,085,049	9,663,530
1922	24	10,539,690	1,461	909,497	2,996,413	9,219,310
Verdun.....1921	3	868,796	593	423,049	518,862	1,072,410
1922	4	949,780	201	213,345	520,985	911,464
Victoriaville.....1921	19	2,732,681	488	349,859	454,252	1,758,732
1922	22	2,728,163	327	260,591	357,363	1,527,913
Waterloo.....1921	11	249,440	105	81,862	121,133	215,948
1922	10	281,502	159	118,364	193,296	420,165
Windsor.....1921	8	2,199,042	426	512,035	780,106	1,885,319
1922	12	2,539,006	518	626,654	712,565	2,245,512
Ontario—						
Acton.....1921	14	2,413,098	412	382,291	1,915,348	2,232,020
1922	11	3,038,057	434	368,081	1,313,449	2,185,758
Alexandria.....1921	16	855,650	111	100,781	336,142	641,496
1922	18	721,800	147	105,640	308,686	553,083
Alliston.....1921	12	103,028	28	19,533	127,208	216,339
1922	12	165,617	31	21,847	37,728	333,583
Almonte.....1921	18	1,650,854	376	321,699	645,525	1,413,896
1922	14	1,630,506	402	341,462	614,803	1,354,673
Amherstburg.....1921	9	6,581,304	289	579,402	190,158	1,165,648
1922	9	6,452,540	247	416,921	123,421	1,373,766
Arnprior.....1921	14	4,300,234	322	324,610	509,282	1,073,652
1922	17	5,237,494	505	384,102	744,146	7,615,032
Arthur.....1921	10	82,111	26	22,525	275,502	366,963
1922	7	26,834	26	17,193	174,299	257,622
Aurora.....1921	7	945,196	334	307,395	1,278,356	2,114,454
1922	8	1,031,187	310	303,551	1,081,081	2,813,880
Aylmer.....1921	10	764,552	133	105,481	733,612	1,179,593
1922	10	861,144	159	135,695	663,379	1,530,063
Barrie.....1921	20	1,270,452	195	200,729	582,898	1,003,772
1922	20	1,299,122	241	245,175	650,220	1,119,309
Beamsville.....1921	10	412,265	74	82,697	184,922	351,595
1922	8	359,068	63	51,221	134,175	269,694
Beaverton.....1921	6	84,060	11	10,586	38,776	67,344
1922	4	45,568	7	5,683	20,573	49,423
Belleville.....1921	47	2,065,714	640	632,284	702,159	1,856,912
1922	52	2,743,452	755	744,156	985,619	2,679,179
Blenheim.....1921	5	221,960	36	30,729	532,691	618,694
1922	6	123,997	25	16,669	37,172	91,471
Blind River.....1921	3	615,249	107	101,975	249,916	537,409
1922	4	464,895	99	102,093	332,715	586,314
Bobcaygeon.....1921	6	39,157	11	5,377	23,270	39,410
1922	6	43,943	9	4,173	22,715	43,621
Bowmanville.....1921	17	3,633,828	316	355,568	916,503	1,731,666
1922	20	2,907,802	491	370,226	956,288	2,162,067
Bracebridge.....1921	16	4,445,380	331	284,732	1,646,415	2,192,568
1922	15	1,688,017	220	163,944	305,845	597,317
Brampton.....1921	14	2,147,269	540	627,602	1,096,085	3,216,370
1922	20	2,441,686	765	917,917	1,468,756	2,983,211
Brantford.....1921	99	49,825,282	6,050	6,578,502	14,099,393	28,104,005
1922	117	50,060,770	5,778	6,127,567	12,043,365	23,521,571
Brockville.....1921	34	5,604,908	913	987,122	2,528,338	4,477,214
1922	43	5,579,495	888	971,738	2,066,829	3,815,461
Bridgeburg.....1921	17	1,127,218	149	191,992	828,418	1,475,036
1922	18	1,122,072	171	213,465	923,367	1,614,431
Brighton.....1921	20	495,270	123	101,675	222,297	420,152
1922	19	381,693	97	53,027	209,635	352,100
Burlington.....1921	11	541,414	96	79,458	294,870	518,712
1922	14	515,788	111	98,782	338,410	527,841
Caledonia.....1921	11	238,167	65	66,461	525,918	689,834
1922	11	298,658	91	94,811	601,471	876,822
Campbellford.....1921	31	2,043,591	413	364,908	1,222,894	2,077,644
1922	26	2,111,993	491	428,540	1,237,606	2,127,703
Cardinal.....1921	5	2,622,662	277	317,058	811,939	1,350,651
1922	5	2,894,210	294	314,310	1,406,423	2,278,192
Carleton Place.....1921	21	2,570,895	565	558,775	1,132,281	2,072,179
1922	23	2,758,736	690	671,846	974,839	2,495,393

23.—Statistics of Manufactures by Cities, Towns and Villages of 1,000 population and over, 1921 and 1922—continued.

Cities and Towns.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Value of products.
	No.	\$	No.	\$	\$	\$
Ontario—con.						
Chatham.....1921	56	12,463,115	2,065	2,274,171	12,444,301	20,618,655
1922	59	12,645,964	2,004	2,163,951	7,830,116	13,361,770
Chesley.....1921	12	895,067	240	242,498	461,381	996,516
1922	13	902,285	318	272,378	476,651	929,041
Clinton.....1921	12	638,145	166	132,652	501,551	689,010
1922	16	684,094	181	136,963	386,750	671,268
Cobalt.....1921	11	12,926,327	155	217,733	57,555	760,023
1922	10	13,063,639	151	235,548	47,782	847,430
Cobourg.....1921	25	2,503,313	409	379,704	998,906	2,135,594
1922	31	2,837,866	570	529,770	998,388	2,339,144
Cochrane.....1921	6	139,960	22	22,232	30,445	113,438
1922	6	115,801	22	13,785	10,797	120,136
Collingwood.....1921	19	467,453	116	94,942	544,165	791,138
1922	30	671,137	151	121,899	1,906,164	1,844,456
Cornwall.....1921	42	11,031,169	1,985	1,761,544	2,468,775	6,590,458
1922	41	11,280,468	2,327	1,887,900	4,050,834	8,589,390
Deseronto.....1921	8	165,246	71	37,167	137,836	221,250
1922	11	972,462	242	186,189	517,831	1,042,331
Dresden.....1921	9	227,230	58	73,499	160,925	434,263
1922	9	275,519	63	63,549	248,928	437,172
Dundas.....1921	24	4,168,620	684	957,824	1,095,975	2,371,295
1922	24	5,002,981	701	749,998	1,039,181	2,118,322
Dunnville.....1921	20	2,087,466	434	444,154	1,070,916	1,739,807
1922	16	2,672,259	493	483,651	924,606	2,426,703
Durham.....1921	12	722,590	192	185,046	582,453	909,058
1922	11	714,280	187	172,770	399,495	691,082
Eastview.....1921	3	56,762	6	5,000	89,019	110,050
1922	4	54,684	10	10,484	40,182	64,766
Eganville.....1921	5	137,797	23	18,115	146,241	192,296
1922	6	120,676	20	15,854	104,409	145,988
Elmira.....1921	16	1,508,297	320	288,665	665,203	1,420,227
1922	17	1,763,763	349	352,367	813,582	1,883,366
Elora.....1921	8	567,067	125	138,258	195,298	411,108
1922	10	547,917	192	167,121	223,650	499,163
Essex.....1921	8	135,440	28	28,243	192,103	280,669
1922	12	200,803	29	33,042	132,163	235,169
Fénelon Falls.....1921	7	36,458	10	7,172	88,122	122,252
1922	9	106,147	18	12,251	89,901	146,175
Fergus.....1921	13	1,336,061	295	292,770	1,199,410	1,987,983
1922	13	1,339,250	289	280,940	959,818	1,633,346
Forest.....1921	10	313,653	80	75,481	313,412	548,750
1922	10	238,716	79	72,870	189,188	349,895
Fort Frances.....1921	8	6,246,107	558	770,258	2,177,029	5,289,537
1922	9	4,186,911	626	944,027	2,866,378	5,775,662
Fort William.....1921	39	23,040,048	1,872	1,598,423	8,667,900	12,449,009
1922	42	21,837,755	944	1,174,964	4,185,809	7,716,375
Galt.....1921	83	14,115,736	3,132	3,235,558	5,805,351	12,108,176
1922	75	13,645,483	2,903	2,859,874	3,836,314	18,012,176
Gananoque.....1921	27	4,090,185	631	582,582	1,067,079	2,379,414
1922	25	2,711,793	453	440,772	660,629	1,519,501
Georgetown.....1921	14	2,268,109	309	377,197	1,323,922	2,134,429
1922	19	3,017,790	419	447,651	1,362,366	2,137,562
Goderich.....1921	19	1,798,111	291	269,209	5,429,391	6,826,414
1922	21	1,534,346	271	245,329	3,942,880	5,073,070
Gravenhurst.....1921	8	587,949	117	104,348	157,972	329,639
1922	9	587,515	116	95,980	162,653	373,328
Grimsby.....1921	17	625,369	181	168,716	423,249	798,126
1922	12	609,714	206	176,322	448,865	817,258
Guelph.....1921	87	14,188,698	3,118	3,564,083	4,767,520	9,592,823
1922	94	13,236,761	3,710	3,731,743	6,881,762	14,918,221
Hagersville.....1921	8	210,731	28	36,227	1,053,157	1,164,617
1922	6	192,606	29	38,473	765,001	913,971
Haileybury.....1921	7	26,840	11	9,959	24,861	55,261
1922	3	513,339	14	21,593	5,645	22,478
Hamilton.....1921	399	142,006,725	28,192	28,062,403	53,074,110	109,803,883
1922	437	143,168,098	23,476	26,256,146	50,844,910	100,280,131
Hanover.....1921	14	2,197,330	361	492,567	731,180	1,440,411
1922	17	2,602,520	563	556,587	883,985	1,905,952
Harriston.....1921	9	187,290	52	51,438	175,870	325,960
1922	10	181,538	42	30,190	121,274	238,824
Havelock.....1921	5	60,206	13	4,323	44,445	61,780
1922	6	64,733	11	6,657	39,236	66,205
Hawkesbury.....1921	12	6,853,282	422	398,085	993,328	2,003,881
1922	12	6,028,282	536	447,173	1,898,027	3,235,042

23.—Statistics of Manufactures by Cities, Towns and Villages of 1,000 population and over, 1921 and 1922—continued.

Cities and Towns.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Value of products.
	No.	\$	No.	\$	\$	\$
Ontario—con.						
Hespeler.....	1921	15	5,112,798	985	875,626	1,093,715
	1922	20	5,295,939	1,118	1,013,514	1,800,479
Huntsville.....	1921	12	4,312,444	332	311,863	1,172,968
	1922	11	5,303,589	342	283,014	2,164,334
Iroquois.....	1921	13	291,560	25	19,018	124,566
	1922	18	336,154	57	41,749	204,858
Ingersoll.....	1921	27	4,237,420	577	687,263	1,642,307
	1922	28	4,121,669	688	634,657	2,675,596
Keewatin.....	1921	4	4,951,639	788	1,106,508	14,654,858
	1922	4	4,481,503	446	700,538	11,377,083
Kemptville.....	1921	16	183,295	60	47,347	196,842
	1922	11	231,303	44	38,650	248,428
Kenora.....	1921	11	2,605,243	109	121,316	1,136,159
	1922	10	3,997,456	102	122,238	2,824,117
Kincardine.....	1921	18	1,000,056	307	317,353	407,337
	1922	14	922,545	328	281,768	405,928
Kingston.....	1921	52	11,670,847	1,267	1,223,953	2,387,657
	1922	66	11,513,370	1,259	2,215,747	2,026,223
Kingsville.....	1921	9	490,016	36	45,974	517,943
	1922	9	756,496	71	96,776	779,575
Kitchener.....	1921	121	30,137,112	7,089	6,417,437	13,312,932
	1922	130	30,456,512	6,712	6,901,892	13,924,576
Lakefield.....	1921	6	97,868	20	15,231	56,867
	1922	6	89,726	16	12,793	64,520
Leamington.....	1921	14	1,590,895	354	278,682	1,062,308
	1922	20	1,587,788	292	180,495	1,194,360
Lindsay.....	1921	31	2,440,684	472	481,800	1,159,466
	1922	31	1,687,147	338	333,970	817,125
Listowel.....	1921	17	540,630	208	190,114	744,406
	1922	21	1,103,474	302	269,145	737,343
London.....	1921	222	33,698,288	7,384	8,437,581	16,633,765
	1922	232	37,032,875	8,535	9,013,889	16,472,501
L'Orignal.....	1921	4	189,839	14	15,813	8,744
	1922	7	110,328	53	43,582	111,049
Madoc.....	1921	10	39,872	18	10,080	93,087
	1922	8	50,644	16	8,000	72,975
Markham.....	1921	5	58,093	13	9,597	39,072
	1922	6	64,264	18	13,410	54,329
Mattawa.....	1921	4	38,530	5	3,905	8,992
	1922	4	38,851	8	7,350	8,824
Meaford.....	1921	11	1,367,306	285	313,039	748,036
	1922	12	1,083,061	332	332,944	797,269
Merriton.....	1921	12	6,892,567	823	878,655	1,525,215
	1922	9	4,013,624	442	703,775	1,287,286
Midland.....	1921	15	2,115,854	250	331,490	637,377
	1922	16	3,448,777	433	439,637	1,833,582
Milton.....	1921	10	491,617	83	80,793	273,217
	1922	9	650,234	143	126,825	409,287
Mitchell.....	1921	11	521,010	117	116,894	189,707
	1922	11	602,158	180	156,610	175,796
Mount Forest.....	1921	13	531,605	109	101,445	454,841
	1922	13	460,367	70	56,271	388,749
Morrisburg.....	1921	9	169,626	46	30,253	52,016
	1922	11	175,203	40	35,416	92,904
Napanea.....	1921	19	805,013	199	193,000	580,928
	1922	22	791,634	199	188,034	579,779
New Hamburg.....	1921	13	786,860	174	152,272	281,857
	1922	15	992,582	203	175,923	377,119
New Liskeard.....	1921	11	1,119,624	254	272,352	498,252
	1922	8	871,318	91	91,872	129,981
Newmarket.....	1921	14	2,078,760	334	589,629	1,445,044
	1922	13	2,460,641	683	635,576	1,630,320
New Toronto.....	1921	7	15,152,742	951	1,326,992	3,094,957
	1922	10	12,422,065	1,494	1,613,634	5,576,789
Niagara.....	1921	6	238,176	51	49,973	74,276
	1922	6	219,881	52	35,357	93,654
Niagara Falls.....	1921	58	26,164,130	2,121	2,177,253	6,365,553
	1922	60	28,330,980	2,305	2,841,083	7,788,155
North Bay.....	1921	16	792,738	159	195,536	268,743
	1922	16	652,611	165	173,047	323,764
Norwich.....	1921	11	593,988	134	136,188	1,139,686
	1922	11	579,708	115	122,104	669,595
Oakville.....	1921	19	2,051,702	397	466,430	860,143
	1922	40	2,053,674	459	555,962	1,092,127

23.—Statistics of Manufactures by Cities, Towns and Villages of 1,000 population and over, 1921 and 1922—continued.

Cities and Towns.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Value of products.
	No.	\$	No.	\$	\$	\$
Ontario—con.						
Orangeville.....1921	10	692,772	78	77,714	145,304	364,765
1922	11	520,767	103	75,730	223,946	399,173
Orillia.....1921	35	4,793,893	772	858,508	939,691	2,510,453
1922	39	5,420,732	898	860,017	1,161,152	2,593,166
Oshawa.....1921	28	17,444,828	2,896	3,418,396	18,990,616	27,801,398
1922	34	20,658,430	4,052	4,883,478	28,535,248	40,131,834
Ottawa.....1921	181	38,184,743	5,841	7,254,469	27,854,285	41,949,894
1922	203	38,530,758	6,667	7,742,794	34,581,220	49,202,686
Owen Sound.....1921	51	6,654,133	1,560	2,703,936	1,922,845	4,748,791
1922	53	6,937,267	1,643	1,594,944	1,920,436	4,681,518
Palmerston.....1921	8	134,268	32	25,509	299,111	420,007
1922	9	204,795	54	44,484	193,336	420,529
Paris.....1921	15	4,023,373	795	531,006	1,390,354	3,392,064
1922	16	4,180,474	1,035	830,204	2,500,058	4,319,023
Parkhill.....1921	6	131,764	24	23,936	79,755	142,977
1922	6	155,018	23	21,235	134,493	198,169
Parry Sound.....1921	15	1,000,546	130	113,827	245,809	514,378
1922	11	705,688	58	58,154	111,504	278,934
Pembroke.....1921	37	4,833,238	911	905,051	1,662,083	3,660,241
1922	41	5,677,427	1,345	1,078,151	2,529,777	5,662,830
Penetanguishene.....1921	15	2,365,633	417	482,484	1,063,195	2,387,777
1922	17	3,243,541	513	421,937	1,049,936	2,077,632
Perth.....1921	28	3,863,062	623	624,362	1,116,977	2,445,803
1922	27	3,772,143	653	708,737	975,202	2,524,367
Peterboro.....1921	78	18,220,497	3,897	3,712,801	19,040,393	28,214,981
1922	77	22,481,704	3,953	3,807,655	16,014,313	24,387,583
Petrolia.....1921	15	1,903,792	243	300,155	2,207,345	3,151,265
1922	17	1,965,208	185	230,619	1,881,702	2,928,622
Pictou.....1921	22	821,433	220	169,950	523,593	978,550
1922	29	873,734	300	181,491	798,776	1,332,412
Port Arthur.....1921	18	4,020,361	383	501,831	891,351	2,440,819
1922	18	5,831,838	520	528,605	706,267	2,305,207
Port Colborne.....1921	9	6,485,796	322	435,654	9,058,557	10,373,457
1922	8	4,639,053	306	483,860	11,477,047	13,580,633
Port Dalhousie.....1921	5	808,302	150	76,881	156,845	310,020
1922	3	121,155	53	28,623	70,153	111,221
Port Dover.....1921	7	201,766	51	32,463	273,943	360,922
1922	9	244,535	55	34,337	267,452	359,028
Port Elgin.....1921	8	479,193	184	177,077	338,763	548,896
1922	7	430,802	173	160,813	255,244	503,140
Port Hope.....1921	30	2,494,569	514	546,948	522,777	1,565,621
1922	35	2,763,252	577	616,731	653,198	1,935,318
Port Perry.....1921	12	204,912	42	36,585	225,292	290,946
1922	14	190,204	48	36,405	232,843	334,886
Prescott.....1921	10	1,578,296	171	195,717	361,176	802,780
1922	12	768,943	193	185,944	481,218	902,376
Preston.....1921	35	5,370,489	1,383	1,672,090	2,515,734	5,672,088
1922	38	5,627,976	1,634	1,773,446	2,519,261	5,724,077
Renfrew.....1921	22	4,189,863	406	480,473	1,779,295	2,984,036
1922	21	3,730,880	444	507,893	1,495,143	2,579,356
Ridgetown.....1921	11	272,532	74	46,702	235,993	398,926
1922	12	283,982	79	57,501	206,570	375,624
Rockland.....1921	4	36,150	8	5,423	49,404	69,119
1922	5	195,369	434	349,690	939,776	1,453,922
Sarnia.....1921	35	24,361,832	2,286	3,448,932	14,600,248	20,916,723
1922	41	25,498,739	2,467	3,386,413	14,240,797	23,101,080
Sandwich.....1921	10	1,623,695	201	292,731	407,615	1,114,751
1922	8	1,785,323	287	447,915	376,403	1,236,466
Sault Ste. Marie.....1921	42	69,849,824	3,013	4,475,490	17,351,584	30,743,864
1922	39	45,924,176	1,960	2,973,642	13,086,596	21,203,622
Seaforth.....1921	15	305,035	105	75,878	473,224	722,507
1922	16	234,811	75	60,917	215,223	386,113
Shelburne.....1921	8	92,356	21	21,554	162,231	227,557
1922	10	131,427	27	25,233	132,439	200,264
Simcoe.....1921	26	1,880,769	295	378,922	1,002,352	1,878,753
1922	28	1,888,594	478	372,753	1,500,552	2,529,068
Smith's Falls.....1921	16	3,825,411	490	547,365	1,074,807	1,978,172
1922	23	3,711,055	491	495,631	622,210	1,481,384
Southampton.....1921	5	538,552	136	146,287	200,520	451,456
1922	5	539,929	166	162,774	152,477	375,063
Stratford.....1921	57	6,084,355	1,702	1,837,505	4,565,889	8,325,589
1922	54	6,224,338	1,697	1,721,445	3,698,355	7,003,824
Strathroy.....1921	18	1,206,355	173	162,545	434,519	833,694
1922	16	1,209,250	227	199,157	417,146	980,629

23.—Statistics of Manufactures by Cities, Towns and Villages of 1,000 population and over, 1921 and 1922—continued.

Cities and Towns.	Estab- lish- ments.	Capital.	Em- ployees.	Salaries and wages.	Cost of materials.	Value of products.
	No.	\$	No.	\$	\$	\$
Ontario—concluded.						
Stouffville.....	1921 8	75,615	23	14,779	139,731	188,348
	1922 9	116,638	20	15,126	121,210	180,861
Sturgeon Falls.....	1921 8	7,532,874	454	715,265	1,368,924	3,256,345
	1922 10	7,288,434	479	692,270	1,661,119	3,610,446
Sudbury.....	1921 23	2,580,873	235	317,581	543,003	1,418,952
	1922 25	3,002,380	292	320,693	965,352	1,907,848
St. Catharines.....	1921 96	15,975,141	3,051	3,486,306	4,922,860	11,647,843
	1922 102	16,827,175	3,033	3,524,559	4,733,505	11,789,451
St. Thomas.....	1921 56	3,903,740	950	1,011,302	3,483,302	6,166,643
	1922 54	4,332,366	990	1,027,527	3,139,216	5,756,070
St. Marys.....	1921 21	1,510,744	423	336,990	1,484,921	2,173,829
	1922 20	1,079,029	312	262,027	504,292	1,088,368
Tavistock.....	1921 12	537,088	140	133,341	1,143,511	1,470,691
	1922 14	492,232	157	128,679	806,850	1,095,379
Thessalon.....	1921 7	509,345	156	159,287	694,145	1,501,703
	1922 8	372,276	169	195,468	608,392	939,673
Thorold.....	1921 14	17,475,807	1,727	2,707,471	5,648,865	12,736,498
	1922 17	18,252,046	1,493	2,087,136	5,678,590	12,037,964
Tilbury.....	1921 8	428,034	121	105,031	375,222	581,702
	1922 6	222,407	35	28,087	79,718	145,983
Tilsonburg.....	1921 19	1,252,407	284	263,842	829,830	1,379,835
	1922 21	1,316,808	343	318,334	729,692	1,307,979
Toronto.....	1921 1,706	370,426,285	66,708	84,147,050	192,538,233	371,090,034
	1922 1,811	392,469,184	78,333	92,930,846	205,568,765	394,065,052
Trenton.....	1921 20	4,117,191	325	273,803	1,029,957	1,658,473
	1922 25	4,591,778	409	351,587	1,124,368	1,930,793
Tweed.....	1921 11	151,900	42	32,811	142,298	214,866
	1922 15	237,056	92	74,432	276,487	435,166
Vankleek Hill.....	1921 12	98,457	25	12,372	157,345	207,270
	1922 16	135,480	36	19,616	171,339	222,546
Victoria Harbour.....	1921 3	1,381,322	167	213,037	338,294	718,835
	1922 3	1,454,842	167	156,853	356,288	831,105
Walkerton.....	1921 21	1,146,364	254	255,304	815,525	1,422,155
	1922 19	939,246	311	275,345	851,425	1,407,550
Walkerville.....	1921 46	24,053,683	2,704	4,108,369	13,548,920	25,942,611
	1922 43	26,786,572	3,642	5,146,662	16,305,869	27,322,381
Wallaceburg.....	1921 18	2,666,237	915	890,868	3,092,340	5,886,635
	1922 20	3,276,011	858	953,076	4,992,487	7,282,784
Waterford.....	1921 10	383,780	72	50,429	237,114	404,303
	1922 10	437,107	103	63,300	262,151	462,950
Waterloo.....	1921 37	6,569,573	1,015	1,181,575	2,586,165	4,953,159
	1922 40	11,312,221	1,213	1,369,745	2,355,780	5,241,789
Watford.....	1921 10	254,713	64	64,578	171,395	343,302
	1922 13	293,360	73	59,004	196,823	389,161
Welland.....	1921 39	19,885,253	2,127	2,538,140	7,935,411	14,571,857
	1922 44	24,154,457	2,426	2,531,363	6,171,119	11,748,039
Weston.....	1921 9	4,774,204	477	512,352	991,173	1,828,735
	1922 8	3,826,180	604	678,938	850,252	1,974,878
Whitby.....	1921 6	534,269	164	207,950	214,267	522,478
	1922 5	283,050	162	155,972	85,522	328,075
Warton.....	1921 16	475,374	100	79,092	191,442	363,921
	1922 10	403,650	74	60,708	118,409	251,706
Winchester.....	1921 9	255,197	50	47,548	154,533	256,264
	1922 14	256,201	58	53,287	180,893	291,454
Windsor.....	1921 118	17,570,621	2,848	4,886,880	6,848,062	16,113,891
	1922 111	15,361,999	2,802	4,002,199	7,381,047	16,561,621
Wingham.....	1921 23	888,139	250	205,511	623,332	1,175,530
	1922 23	953,680	282	205,186	522,789	1,049,618
Woodstock.....	1921 65	9,179,455	1,801	1,837,028	4,665,286	7,910,256
	1922 70	9,276,886	1,930	1,907,257	3,883,740	7,277,329
Manitoba—						
Brandon.....	1921 36	3,848,221	497	577,493	2,937,203	4,294,006
	1922 39	3,068,801	453	599,047	2,427,696	4,005,610
Carman.....	1921 5	51,814	12	9,253	32,655	59,551
	1922 5	9,584	11	8,083	43,920	66,936
Dauphin.....	1921 10	332,112	60	66,094	214,900	404,188
	1922 8	262,048	46	47,673	146,765	250,132
Minnedosa.....	1921 3	119,794	8	9,369	6,451	39,992
	1922 5	22,589	7	6,951	10,405	34,292
Morden.....	1921 4	474,460	7	5,752	32,632	60,957
	1922 4	15,794	7	6,833	35,620	58,059
Neepawa.....	1921 7	179,986	29	35,572	82,286	170,008
	1922 6	121,067	22	22,579	85,940	134,256

23.—Statistics of Manufactures by Cities, Towns and Villages of 1,000 population and over, 1921 and 1922—continued.

Cities and Towns.	Estab-lish-ments.	Capital.	Em-ployees.	Salaries and wages.	Cost of materials.	Value of products.
	No.	\$	No.	\$	\$	\$
Manitoba—concluded.						
Portage la Prairie.....	1921 12	794,418	173	221,308	3,017,579	3,663,976
	1922 14	506,632	141	193,133	1,911,667	2,403,651
Selkirk.....	1921 7	1,361,084	127	157,729	198,001	937,627
	1922 7	1,543,808	226	291,667	430,480	1,117,108
Souris.....	1921 5	512,600	33	34,921	299,952	385,798
	1922 7	510,487	31	30,779	193,294	266,467
St. Boniface.....	1921 19	5,129,178	890	1,236,335	9,565,681	12,304,665
	1922 24	5,585,732	875	1,116,092	9,330,133	11,394,288
Stonewall.....	1921 3	30,036	23	7,686	7,892	20,207
	1922 3	31,700	12	7,626	18,017	26,623
Pas.....	1921 5	1,783,503	235	146,651	402,908	856,847
	1922 4	1,399,184	271	286,437	498,185	980,630
Winnipeg.....	1921 419	67,354,844	11,046	15,521,375	39,701,665	75,180,039
	1922 436	46,251,208	10,679	13,858,116	36,766,668	66,925,392
Saskatchewan—						
Battleford.....	1921 7	102,062	13	14,100	75,972	119,337
	1922 8	186,591	25	29,722	134,633	234,494
Biggar.....	1921 5	37,435	9	10,940	26,205	46,459
	1922 7	59,939	14	14,319	21,442	59,011
Canora.....	1921 4	67,000	6	6,946	18,559	44,325
	1922 3	62,590	6	7,645	13,020	36,596
Estevan.....	1921 7	180,553	31	33,955	128,431	236,087
	1922 8	223,178	39	40,410	125,084	256,608
Humboldt.....	1921 6	182,173	35	38,125	141,338	226,466
	1922 5	175,826	29	30,264	112,511	234,098
Indian Head.....	1921 4	78,998	14	16,319	27,182	68,997
	1922 5	73,197	11	12,900	21,370	62,333
Kamsack.....	1921 3	93,226	13	15,632	6,583	59,577
	1922 3	89,642	10	10,512	6,402	49,371
Maple Creek.....	1921 4	113,532	13	13,490	67,373	91,689
	1922 5	122,632	15	13,686	85,944	135,020
Melville.....	1921 5	187,838	18	24,754	63,404	127,297
	1922 6	202,566	19	24,298	79,989	154,907
Melfort.....	1921 7	201,492	24	28,357	44,753	117,577
	1922 8	117,468	24	23,943	55,950	138,885
Moose Jaw.....	1921 29	2,525,994	607	846,256	7,659,715	10,186,081
	1922 37	2,804,479	641	922,347	6,033,484	8,756,133
Moosomin.....	1921 6	56,146	11	8,215	35,864	61,787
	1922 5	57,121	8	7,038	30,703	54,118
North Battleford.....	1921 13	519,014	88	96,487	292,051	535,388
	1922 13	522,470	85	99,294	231,042	463,008
Prince Albert.....	1921 17	1,498,287	290	397,200	1,492,234	2,268,617
	1922 18	1,408,527	259	356,700	1,113,039	1,801,379
Regina.....	1921 43	11,690,695	1,211	1,909,788	7,322,783	13,022,448
	1922 53	12,580,823	1,313	1,907,618	7,616,947	14,228,413
Rosthern.....	1921 4	96,150	8	10,665	145,587	233,273
	1922 4	86,710	8	8,474	35,118	68,401
Saskatoon.....	1921 46	6,608,873	911	1,246,625	5,153,330	7,973,702
	1922 47	6,195,767	935	1,256,729	4,225,847	7,272,562
Shaunavon.....	1921 5	95,367	11	15,525	24,455	58,708
	1922 7	98,797	16	20,382	40,812	97,518
Swift Current.....	1921 9	519,718	69	82,898	93,641	354,207
	1922 8	528,178	55	67,550	104,894	306,848
Weyburn.....	1921 11	434,387	62	76,973	294,945	463,060
	1922 12	513,835	69	84,009	223,673	419,427
Yorkton.....	1921 9	588,153	65	59,924	171,876	348,287
	1922 10	726,874	70	67,854	230,616	482,854
Alberta—						
Blairmore.....	1921 4	168,003	42	63,982	92,794	268,894
	1922 5	328,670	48	80,145	77,696	228,672
Calgary.....	1921 149	11,507,762	2,516	3,785,086	11,448,027	19,879,151
	1922 149	20,267,183	2,694	3,819,995	9,332,646	17,827,762
Camrose.....	1921 6	117,876	39	46,097	160,124	269,048
	1922 8	146,820	38	42,124	172,800	283,373
Cardston.....	1921 5	128,515	16	9,913	63,901	89,415
	1922 6	134,730	15	13,212	48,841	84,974
Edmonton.....	1921 135	14,444,532	3,271	3,307,792	10,147,036	17,661,036
	1922 124	12,608,091	2,657	3,180,017	10,679,348	17,386,618
High River.....	1921 6	84,929	12	17,401	11,067	57,970
	1922 5	71,238	9	9,884	10,131	47,712
Lacombe.....	1921 5	83,083	12	14,339	80,033	130,471
	1922 5	79,545	12	13,329	78,362	144,503

23.—Statistics of Manufactures by Cities, Towns and Villages of 1,000 population and over, 1921 and 1922—concluded.

Cities and Towns.	Estab-lish-ments.	Capital.	Em-ployees.	Salaries and wages.	Cost of materials.	Value of products.
	No.	\$	No.	\$	\$	\$
Alberta—concluded.						
Lethbridge.....1921	30	2,959,646	361	527,023	1,061,717	3,546,126
1922	28	3,122,551	290	392,619	894,317	2,077,028
Macleod.....1921	3	91,945	15	18,959	7,858	56,119
1922	3	96,570	13	11,731	21,462	59,652
Medicine Hat.....1921	25	3,785,502	434	556,884	7,233,433	9,137,155
1922	27	4,528,421	480	562,909	5,639,647	7,305,998
Red Deer.....1921	12	241,903	52	74,623	171,935	311,898
1922	8	257,060	40	56,355	171,983	303,782
Stettler.....1921	5	64,558	19	21,053	124,278	202,342
1922	4	36,649	6	9,266	19,111	61,979
Taber.....1921	3	51,630	8	20,555	3,778	24,846
1922	3	54,678	8	15,724	6,424	25,869
Vegreville.....1921	4	65,490	13	17,413	30,538	82,593
1922	6	85,947	20	20,556	89,799	176,051
Wetaskiwin.....1921	8	199,150	32	33,894	167,399	265,270
1922	5	188,346	29	30,585	172,001	282,172
British Columbia—						
Cranbrook.....1921	8	99,084	18	24,642	24,471	99,590
1922	7	106,848	16	21,127	24,142	91,462
Chilliwack.....1921	4	12,051	6	5,734	14,984	26,561
1922	6	25,074	13	13,904	17,706	42,310
Cumberland.....1921	6	133,618	53	65,517	70,717	268,139
1922	4	183,745	27	39,664	44,146	252,030
Fernie.....1921	8	879,141	76	119,965	304,294	611,744
1922	10	2,881,631	119	156,875	124,814	579,381
Grand Forks.....1921	5	69,662	17	15,712	38,203	72,298
1922	5	89,292	22	24,164	45,287	122,463
Kamloops.....1921	12	409,462	69	95,371	135,143	275,408
1922	11	735,187	95	128,065	524,956	865,359
Kelowna.....1921	11	704,487	150	157,244	455,521	809,630
1922	12	814,557	162	172,171	506,268	867,940
Ladysmith.....1921	6	94,427	40	76,980	65,447	198,201
1922	5	64,082	94	53,684	70,654	151,730
Nanaimo.....1921	29	762,194	187	146,960	281,376	640,410
1922	35	781,609	413	182,316	427,774	830,066
Nelson.....1921	22	821,797	143	175,030	218,402	600,000
1922	23	985,764	215	247,403	253,442	766,730
New Westminster.....1921	47	6,122,145	1,430	1,553,691	4,431,455	7,669,620
1922	49	4,932,479	1,034	1,203,444	4,236,522	6,561,061
North Vancouver.....1921	8	160,393	79	75,671	80,009	211,476
1922	8	469,428	73	104,584	173,490	345,025
Prince Rupert.....1921	19	2,896,713	379	461,685	1,546,268	2,494,253
1922	17	2,008,998	297	392,309	1,376,693	2,093,713
Revelstoke.....1921	10	292,057	30	39,869	36,219	211,432
1922	10	299,790	35	31,634	32,431	140,871
Rossland.....1921	5	5,137,397	66	133,431	75,487	866,257
1922	7	5,430,697	67	115,229	2,725	734,619
Trail.....1921	3	28,300	9	11,490	5,937	26,047
1922	5	31,473	8	5,910	13,259	32,134
Vancouver.....1921	441	72,065,459	10,438	12,446,231	35,287,999	65,035,973
1922	485	75,030,953	10,598	10,579,482	35,507,418	63,172,964
Vernon.....1921	12	508,759	104	118,299	154,293	376,769
1922	12	687,406	132	117,590	167,874	385,381
Victoria.....1921	130	13,936,778	1,702	2,185,696	2,968,160	8,025,914
1922	135	13,972,398	2,000	2,430,586	3,614,954	8,777,622

3.—Typical Individual Manufactures.

The foregoing discussion has furnished a general view of the recent development of the groups under which, to facilitate the comparison of one broad type of manufacturing with another, the numerous manufacturing industries of Canada have been classified. To supplement this treatment it is considered desirable to describe the evolution of individual industries, but considerations of space make it impossible to deal with any but a few representative developments. The cotton and automobile industries have been selected for treatment in the present edition, to be followed by similar studies of other industries in subsequent issues. Descriptions of the

flour-milling industry, the boot and shoe industry, the woollen industry, the iron and steel industry, and the chemical and allied products industries, were included in the 1922-23 edition of the Year Book.

1.—The Cotton Manufacturing Industry.

The value of cotton as a textile fibre was appreciated many centuries ago, when cotton cloth, made entirely by hand and universally considered a luxury, was nevertheless quite widely used. As a result of the industrial revolution in England and later in the United States and the adaptation of cotton manufacture to machine process, it has now become one of the most universally used and inexpensive of the textiles.

The cotton plant, from the seed of which the fibres are taken, is of tropical or sub-tropical nature and is grown most advantageously under moderate conditions between latitudes 40° north and 30° south, the areas most favourable to its production including the southern States of the United States bordering on the Atlantic and the gulf of Mexico, Brazil, Egypt, India, some parts of West Africa and China.

It was only at the close of the 18th century that earlier hand methods of separating the cotton fibre from the seed in preparation for further treatment were replaced by a machine process on the invention of Whitney's saw gin, and since that time the manufacture of cotton goods has been still further adapted to machine methods, with resulting reduction in cost and improvement in the quality of product.

The manufacture of cotton products has been carried on for many years on a larger scale in the Lancashire district of England than elsewhere in the world, owing largely to the early start it received in the opening years of the 19th century, the peculiarly favourable climate for the various spinning and weaving operations, and the comparative cheapness of skilled labour. It has been offered considerable competition by the mills of the New England states, where in the Fall River area particularly, very similar climatic conditions and a somewhat comparable labour force are found, in addition to the water power resources which formed such an important factor in the original location of the mills. The British industry, however, is still predominant.

Early Canadian Cotton Mills.—Canadian manufacture of cotton goods may be said to date from 1844, when a mill was erected in Sherbrooke, Quebec. The capital was fixed at £12,000 and the promoters formed the first limited liability company in Canada. The mill had a capacity of 1,200 spindles, and grey sheetings were manufactured successfully for several years. The manager was Adam Lomas, father of the proprietor of what in later years was the Lomas Woollen Mill of Sherbrooke.

The next mill was established at Thorold in Upper Canada in 1847. The capacity in spindles is unrecorded, but the mill operated 15 to 20 looms and made grey sheetings and other plain goods along with cotton batting. The factory was operated intermittently until 1864, when it was destroyed by fire.

A third and more successful cotton mill was founded in Montreal in 1853 by F. W. Harris. The mill had a capacity of 1,500 spindles and 46 looms, and made tickings, denims and seamless bags. Two years after its establishment, a batting and wadding mill was added. The cost of the machinery was £6,500, and the mill employed 70 hands, mostly women and children, whose wages amounted to £2,000 annually. About 300 yards of denims and ticks were made per day. The batting and wadding branch cost £3,000 and had 13 carding machines. It turned out

6,000 yards of wadding and 1,200 lbs. of batting per day, which was rather in excess of the demands of the home market. The mills, afterwards confined to the manufacture of plain grey cottons, existed down to the year 1870.

Meantime, in 1861, William Parks and Son established in St. John, N.B., a mill which remains as the oldest existing cotton mill of the Dominion. In the same year a mill was commenced at Dundas, in Upper Canada, by Joseph Wright from England. The capacity of this mill was 6,000 lbs. of yarn and 120 bales of batting (4,000 to 6,000 lbs.) per week. Afterwards cotton cloth was manufactured as well as yarn, and in 1866 the mill employed 150 to 200 hands.

Impetus of the Civil War.—When the stupendous character of the civil conflict in the United States became realized throughout the world, disturbances were felt in the textile as well as other trades, and the immediate effect in Canada was to give an impetus to both cotton and linen manufacturing. The cotton industry over the border was paralyzed, and many in the European trade believed that the United States would never regain its lost position in either cotton growing or manufacturing. Between 1860 and 1865, the number of mills in Canada increased from one to five, situated at Dundas, Merriton, Hastings, Montreal and St. John. Their total capacity was about 40,000 spindles, and their products were chiefly grey cottons, sheetings, shirtings, yarns, bags and batting and wadding. When the war closed and trade began to resume its old channels, prices fell and a check was put upon further extensions in cotton manufacturing in Canada.

The Position at Confederation.—The census of 1871 showed only eight mills in the whole country, five of them in Ontario. The total hands employed were 745, and though the capacity of the mills was not stated in the returns, it is estimated at about 95,000 spindles. In 1879 the duties on cotton goods were increased from 17½ p.c. to a range of 20 p.c. to 30 p.c. According to the census of 1881 there were 19 cotton mills in Canada, employing 3,527 hands. Five of these mills, however, were only under construction and not yet in operation in any department, and of the 14 producing mills the spinning capacity was about 243,000 spindles. In addition to the mills engaged in the manufacture of wadding and batting, there were in Canada in 1885, according to unofficial sources, 25 mills with 9,702 looms and 461,748 spindles. During the next decade there was no expansion in the number of mills, but the capacity increased to 11,282 looms and 519,700 spindles in 1889, and 12,288 looms and 546,700 spindles in 1892.

Combination and Development of Export Trade.—The fact that for a period of 12 years there was no increase in the number of mills and a very small increase in the productive capacity of those already built, is to be accounted for by the over-investment of capital in mills equipped for goods of the same class. For the common class of cottons most easily produced, the mills in existence in 1882 could supply a population twice that of Canada, and the mill owners were forced either to abandon their property or import machinery by which to diversify their products. The latter was the policy adopted by some, and by 1890, the Canadian mills were producing a very wide range of goods, some of a fineness and quality that were not thought attainable a few years before, comparing favourably in value with any European or American goods of the same class. In 1884, a factory for cotton print goods was built at Magog, Quebec, operating 6 printing machines (afterwards increased to 8 machines), and their establishment absorbed from the home market a large quantity of grey cottons as raw material, which would otherwise have caused a surplus of common grey goods or the closing of some of the mills. Even so the competition of many mills was so reckless

that events forced an amalgamation of several of the mills into two great syndicates, one of which made a specialty of the manufacture of coloured goods of a high grade. This syndicate was known as the Canadian Coloured Cotton Mills Co. The over-expansion of the industry and the excessive competition among the mills making grey goods led, however, to a development never dreamed of by the promoters of early cotton manufacturing—namely, the exportation of Canadian grey cottons to foreign countries, notably China. The first experimental shipment was made to China in 1886, on the completion of the Canadian Pacific Railway, and such was the favour with which Canadian goods were received among the Chinese merchants that a satisfactory trade was developed. The aggregate of Canadian cotton shipped *via* the Canadian Pacific Railway to China in 1887 was 1,742,205 lbs., increasing to 3,770,345 lbs. in 1894. As these goods average $3\frac{1}{4}$ to $3\frac{1}{2}$ yards to the pound it will be easy to calculate in yards the amount of this trade. In 1889 a mill of 12,000 spindles was built at Montmorency Falls especially for the export trade, and the product of two or three other mills was devoted to the export trade, which was afterwards successfully directed also to Central and North Africa.

In 1898 there were 22 cotton mills in the Dominion, with a total capacity of 15,557 looms and 643,312 spindles. The census for 1900 included 20 cotton mills with a production of \$12,033,052, constituting the most important single industry in the textile group. The average capital of the 20 factories was \$915,000, the average cost of materials \$291,000 and the average value of products \$602,000. The wage earners averaged 594 per factory and the wages for labour, \$167,623. Ten years later considerable development was in evidence. The number of the active mills had increased to 26 and the value of the product had more than doubled, amounting to \$24,585,000.

Expansion during the War.—The immediate influence of the outbreak of war was detrimental; comparative inactivity continued into 1915, when 20 plants only were operating, with a product valued at \$20,513,000. During the later years of the war, the elimination of overseas competition as well as extensive war orders made themselves felt and former records of employment and production were broken. The employees in the 26 plants numbered 16,000 persons in 1918, nearly one-half of whom were women. The production was valued at \$66,000,000, but part of this increase was accounted for by the spectacular rise in prices. The capacity, had in the meantime, been expanded to 21,161 looms and 1,064,681 spindles. The end of the war found retailers' stocks low, and a strong demand for textile goods. The shortage of the cotton crop caused by the ravages of the boll weevil accelerated the upward movement of prices. The activity in the Canadian industry was well maintained during 1919 and reached its greatest expansion during the following year. In 1920, production was valued at \$92,500,000 and the employees numbered 17,625, the capacity being 21,754 looms and 1,057,000 spindles.

Recent Progress.—The apparent decline in 1921 was largely accounted for by the serious recession in prices. The value of the entire production fell from \$92,500,000 in 1920 to \$66,000,000 in 1921, but the production of bleached or white cotton fabrics increased from 55,800,000 square yards in 1920 to 72,300,000 square yards in 1921 and prints from 29,300,000 square yards in 1920 to 30,700,000 square yards in 1921.

In the 33 cotton and yarn mills operating in 1922, the capacity had increased to 1,241,074 spindles and 24,258 looms. Quebec has always led in quantity of production. In 1922, 16 plants manufactured goods to the value of \$51,600,000

out of a total Canadian production of \$72,200,000. The 13 plants of Ontario had a production of \$13,400,000, and 4 mills in the Maritime Provinces, 3 in New Brunswick and 1 in Nova Scotia, had an output of \$7,100,000.

2.—The Automobile Industry.

The growth of the automobile industry is one of the most striking industrial developments of the present century. Twenty-five years ago the automobile was emerging from the experimental stage and the world output was only a few thousand cars. In 1923 the United States alone produced 4,000,000 cars. The passenger automobile is coming to be regarded as a necessity of life. Truck development has been more gradual, because of the investment in established methods of shipping, yet industry in general is coming to look upon the truck as the efficient haulage unit for short distances and especially for less than carload shipments.

The automobile industry to-day is not only one of the most important of modern industries, but has given a great impetus to other important industries, notably the production of plantation rubber. The stimulus to the rubber industry may be appreciated by the statement that on the average every car requires one-eighth of an acre of rubber trees for the maintenance of its tires, so that the demand for rubber in the manufacture of tires has far outstripped all its other uses. Another consequence of the increasing use of automobiles is the remarkable coincident growth of the petroleum industry. While the demand for kerosene and fuel oil is an important consideration, the growth of the oil industry in the last decade has been mainly due to the insistent demand for gasoline arising out of the widespread use of the motor car.

Another industry closely inter-related with motor transportation is that of highway construction. The advent of the motor car has given the movement for improved highways a great impetus, and the extension of hard-surfaced roads during the last five years has far exceeded the records of any corresponding period in the history of the country. On the other hand, any extension of improved highways reacts on the motor industry, inevitably leading to a greater demand for cars.

Growth of the Canadian Industry.—Canada's automobile industry, while one of the youngest of our manufactures, is already one of the most important. The manufacture of automobiles, trucks and accessories dates back only a few years to the time when the Canadian demand for these products became sufficient to stimulate the growth of a purely Canadian industry, as well as to encourage the establishments of branch plants by American concerns in the Canadian field. Following the rapid growth in the manufacture of motor vehicles in the United States after the turn of the century, the industry in Canada may be said to have had its beginnings between 1905 and 1910. The McLaughlin Motor Car Co. Ltd., of Oshawa, was formed in 1907, and contracts were made for Buick manufacturing rights in Canada. Chevrolet rights were acquired in 1915, and three years later came the enlargement of the two McLaughlin motor companies into a Canadian subsidiary of General Motors, known as General Motors of Canada, Ltd.

The Everitt-Metzer-Flanders Co. was incorporated under the laws of Michigan in 1908, and in the following year a Canadian plant for the assembling of automobiles was in operation. The company was merged into the Studebaker Corporation as at Dec. 31, 1910. To-day the Studebaker plant at Walkerville has a capacity of from 12,000 to 15,000 cars per annum, four new buildings containing 36,500 square feet of floor space having been erected in 1920. This establishment receives motors, transmission, axles, bodies and other parts from Detroit and South

Bend plants, which, together with wheels, tires, tops, radiators and other parts purchased in Canada, are assembled into complete cars for Canadian and British Empire trade.

The Ford Motor Car Company of Canada, Ltd., was one of the pioneers in automobile manufacturing in Canada. The company received a provincial charter in 1904 and was re-incorporated under the laws of the Dominion in 1911. The company has the exclusive manufacturing and selling rights of the Ford automobile throughout the British Empire, with the exception of Great Britain and Ireland. The capacity of the plant at Ford city, which has recently been greatly expanded, may be judged by the output of 70,328 cars and 3,395 tractors in the year ended July 31, 1923, as compared with 45,000 cars and 1,192 tractors in the preceding year. Assembly plants are maintained at Toronto, Montreal and Winnipeg, and sales branches at Calgary, Regina, Vancouver, St. John and Windsor.

When the Canada Cycle and Motor Company, Limited, originally engaged in the manufacture of bicycles and motor cycles, turned their attention to the manufacture of automobiles, the Canadian market was unprepared for the product. By 1908 the prejudice against the Canadian-made car had been overcome, and the Company was in a position to place on the market four types of cars as follows:—a two-cylinder car selling at \$1,600, a small four-cylinder car at \$2,000, a five passenger four-cylinder car selling at \$2,500 and a seven passenger 50 h.p. car selling at \$4,500. In 1911, the name of the Company was changed to the Russell Motor Car Co., Ltd., which at present holds stock in the Willys-Overland, Ltd., operating the plant at West Toronto for the production of Overland and Willys-Knight cars.

A recent manufacturer entering the Canadian field is Durant Motors of Canada, Ltd., of Leaside, Ontario. The first car was delivered from the plant on March 1st, 1922, and during the first two years of operation the output was 13,507 cars. The land and buildings, purchased at an original cost of \$300,000, had been increased in value by the erection of new buildings and the installation of equipment to the value of \$1,576,000.

Other active plants include the Chalmers-Maxwell Motor Co. of Canada, Ltd., Windsor, Gray-Dort Motors, Ltd., Chatham, Beaver Truck Builders, Ltd., Hamilton, Godfredson-Joyce Corporation, Ltd., Walkerville, Ruggles Motor Truck Co., Ltd., London, International Harvester Co., Ltd., Chatham, National Car Co., Ltd., Hamilton.

Eight plants were engaged in the manufacture of automobiles in 1910, when the industry was first classified in the census reports. The total production was valued at \$6,250,000, and the employees numbered 2,438. Five years later the same number of plants were in operation, but the production had increased to \$24,360,000 and the capital employed from \$4,700,000 to \$14,000,000. In the six-year period 1918 to 1923, for which the census information is more specific, motor cars to the number of 574,500 were manufactured in Canada. The production in 1923 exceeded all previous records, reaching a total of 147,582 motor cars, trucks, etc., compared with 101,007 in 1922 and 94,144 in 1920.

The Automobile Industry in 1923.—The capital employed in the ten plants in 1923 was in excess of \$60,146,000, the estimated yearly capacity of the plants being 258,500 automobiles and 30,100 trucks, so that the production in 1923 (147,202¹ vehicles) was 51 p.c. of capacity. The total area covered in the plants was 116 acres and the total floor space of buildings 4,196,295 square feet. More than 9,300 employees were directly engaged in the manufacture of automobiles in 1923, the salary and wage distribution being nearly \$15,000,000. The production

¹ In addition to these, 380 trucks were made by other plants.

of motor cars and trucks reached a total value as at factory of nearly \$97,470,000, a transportation investment of great economic importance. The production during 1923 consisted of 106,226 pleasure cars, valued at \$69,904,073; commercial cars to the number of 19,226, valued at \$8,941,011; and 21,750 chassis, valued at \$8,378,299. The total of pleasure cars was made up of 5,296 roadsters, 71,861 five-passenger touring cars, 1,860 seven-passenger touring cars, 10,051 coupes, 16,677 five-passenger closed cars and 481 seven-passenger closed cars. Of the roadsters produced, 4,821 were four-cylinder, 474 six-cylinder and 1 eight-cylinder. The total of five-passenger touring cars consisted of 65,151 four-cylinder, 6,679 six-cylinder and 31 eight-cylinder cars. The total of seven-passenger touring cars included 1,811 six-cylinder, and 49 eight-cylinder. The coupes manufactured during the year included 10,008 four-cylinder, 41 six-cylinder and 2 eight-cylinder. Of the five-passenger closed cars, 15,273 were four-cylinder, 1,352 six-cylinder and 52 eight-cylinder. The total of seven-passenger closed cars was made up of 411 six-cylinder and 70 eight-cylinder.

The commercial automobiles manufactured in Canada during 1923 all contained four-cylinder engines. There were 1,751 under one-ton capacity, 17,467 between one ton and five tons and 8 with capacity of five tons or over. In addition, 380 trucks were made by manufacturers of other products.

Apparent Sale.—The number of new cars made available for sale during 1923, arrived at by deducting the exports from the sum of the manufactures and imports, was 89,046 cars of all descriptions. The number computed in a similar manner for previous years was 62,536 in 1921 and 76,141 in 1922. These estimates, indicating the extent of the preparation for domestic requirements, disclose a remarkable growth. The registrations indicating the number of cars actually in use are presented in considerable detail in a later section of this volume. The increase in registrations from 69,598 in 1914 to 586,764 in 1923 summarizes the story.

Cars Withdrawn from Use.—The number of cars scrapped or withdrawn from use is a question arising in the anticipation of market requirements. The basis used is to credit on the one hand the sum of the cars licensed during the preceding year and manufactured and imported during the year in question, and to deduct from this amount the cars exported and licensed during the same year. In the calculations made, variations in the normal stocks in dealers' and manufacturers' hands from year to year are not considered. It is a matter of record that 504,446¹ licenses were issued to the public in 1922, 147,582 vehicles were made in 1923 and 11,822 were imported, making a total of 663,850 to be accounted for. Of this number, 576,598¹ were registered in 1923, the number exported was 70,358 and the remainder, 16,894, were withdrawn from use. The comparative figures were 25,687 in 1922 and 3,688 in 1921. The number of cars to be replaced must necessarily show an increase as more cars are brought into use. Occasionally one finds a writer who views with alarm the size of the registration figures, totalling 576,598¹ motor vehicles, but to those in the industry this large registration is a guarantee of stability.

Centralization.—In its growth from the early years of the century to the present, the industry has been characterized by several rather striking phenomena. The most remarkable of these has perhaps been the increase in the number of plants engaged in motor car production to a maximum of 17 in 1920, and a subsequent decline to 10 in 1923, while at the same time very substantial increases were shown in the number of persons employed and value of products. The making of motor

¹ Exclusive of tractors and motor cycles.

vehicles is seen not only to be carried on in plants of a size far exceeding the average manufacturing unit, but also in plants which are increasing in capacity and production, while at the same time the smaller and less efficient firms forsake the business. The average value of products per plant in the automobile industry reached in 1923 the large amount of \$9,661,417.

Localization.—A further peculiarity of the industry is its extreme localization, a feature which marks both the manufacture and sale of the products as being entirely distinct from the ordinary. Of the ten plants now in operation in the Dominion, all are located in Ontario, along the northern shores of lake Erie and lake Ontario between Windsor and Oshawa. The primary reasons for this centralization are two in number, the dependence of automobile manufacturing on the products of the iron and steel industry which is situated immediately to the south of lake Erie, and the influence of American capital in Canadian factories, several of which are subsidiary companies controlled by larger American concerns, both making essentially the same product. The sale of automobiles, unlike that of many manufactured articles, has evidently but little effect on the location of plants; it is at least of distinctly less importance than the dependence on the raw and partly manufactured goods used in process.

The Source of Materials.—If the motor car industry were suddenly removed from the field of production, a considerable range of industries engaged in furnishing materials in a crude or intermediate stage of manufacture would be seriously affected by the lessened demand. Leaving out of consideration the petroleum-refining industry, which had in 1922 a gross production of about \$56,500,000, the industry which probably owes most to the development of the automobile trade is that of rubber tire manufacturing, which has not only supplied the local market, but by an aggressive export policy has also created a favourable balance of \$5,500,000 in three types of tires during the latest fiscal year. The total production of automobile tires in 1923 was valued at \$27,800,000, leaving tires to the value of about \$22,300,000 to meet the needs of the home market. The tires used by the manufacturers of automobiles during 1923 cost nearly \$6,200,000. The automobile industry furnishes an excellent market for steel of the better grades, the ten firms in operation in 1923 using 26,900 tons, costing \$2,225,000, and the steel castings used were worth an additional \$3,184,000. Malleable iron and iron castings were used in sufficient quantities to bring the total cost of the iron and steel in these forms to more than \$8,000,000. The dependence on accessory or affiliated plants, situated chiefly in the United States in 1923, was shown by the use of 116,982 ready-made bodies and 67,446 engines, costing \$12,370,000 and \$10,926,000 respectively. A separate function in itself, the distribution and service of the 587,000 motor vehicles now in operation, has brought into existence an ever-increasing number of establishments which cater to the convenience and comfort of the motor vehicle user. More than 2,500 of these places of business are in operation in Canada.

External Trade.—The rapid development of the export trade as shown in Table 24 is one of the notable features of the automobile industry. In the fiscal year 1908, the first full year for which statistics are available, the value of the motor cars exported was \$320,708, as contrasted with \$33,112,094 in 1924. The exports of automobile parts in the latter fiscal year were valued at \$4,612,000, and tires were worth an additional \$6,524,000. In spite of the greatly increased number of cars in use, the imports have not increased, indicating that the growing demand of the domestic market is being supplied by Canadian plants.

Australia is the best market for Canadian passenger cars. In the fiscal year 1923-24, 17,019 cars valued at \$6,115,640 were shipped to that market. After Australia come Great Britain, New Zealand, South Africa and India in the order named. Indeed, the Canadian manufacturers are favoured by preferential tariffs granted by many sections of the British Empire, though it is not to be inferred that the Canadian export trade is restricted to the British Empire, as our manufacturers furnish automobiles to many foreign countries, including Argentina and Chile in South America, Sweden, Belgium and Netherlands in Europe, and the Dutch East Indies, Japan and China in the Orient. While Japan has been a purchaser of Canadian passenger cars for some time, the trade in trucks commenced in the fiscal year 1923-24. After the earthquake in September 1923, came the first rush order for trucks. Rail communication, both steam and trolley, was completely disorganized, and the island kingdom found emergency measures necessary to transport goods and passengers in the devastated areas. Motor truck transportation was thus literally forced upon the country.

**24.—Canadian Imports and Exports of Motor Vehicles, fiscal years ended
March 31, 1907-1924.**

Fiscal Years.	Total Imports.				Total Exports (including re-exports).			
	Passenger.		Freight. ²		Passenger.		Freight. ³	
	No.	\$	No.	\$	No.	\$	No.	\$
1907.....	350	531,028	-	-	126	168,142	-	-
1908.....	674	912,371	-	-	205	320,708	-	-
1909.....	533	585,097	-	-	279	450,127	-	-
1910.....	1,424	1,732,215	-	-	448	627,469	-	-
1911.....	3,488	4,235,196	-	-	787	892,212	-	-
1912.....	6,022	6,511,115	-	-	2,156	2,039,993	-	-
1913.....	8,377	9,738,839	-	-	4,091	2,952,988	-	-
1914.....	6,288	7,213,375	-	-	6,691	4,321,369	-	-
1915.....	5,476	4,888,704	-	-	5,579	3,290,234	-	-
1916.....	8,055	5,089,329	-	-	17,493	9,223,813	-	-
1917.....	12,037	7,981,177	327	423,824	10,331	5,637,465	-	-
1918.....	16,118	11,317,245	964	1,275,179	8,829	4,471,521	-	-
1919.....	6,473	5,326,510	1,744	2,274,748	11,867	6,328,447	2,584	1,347,521
1920.....	10,805	11,204,461	2,274	3,831,084	20,883	13,589,423	4,166	2,319,629
1921.....	5,907	8,399,537	1,706	3,578,938	15,870	11,867,425	3,441	2,733,775
1922.....	7,181	9,501,362	806	1,537,765	13,676	7,879,845	1,314	673,038
1923.....	11,402	11,857,165	1,082	1,889,105	45,372	25,987,515	3,726	1,456,795
1924.....	9,549	9,532,350	1,340	1,910,808	54,939	27,566,869	15,419	5,545,225

¹ Nine months.

² Freight automobiles were classified with passenger automobiles in figures of imports until 1917.

³ Freight automobiles were classified with passenger automobiles in figures of exports until 1919.

IX.—CONSTRUCTION.

Construction is the most conspicuous example of a great industry carried on in almost complete dependence on a local demand. The building industry is not only the most widespread in its operations; it is one which expands most rapidly in good times, when it attracts great numbers of general and casual workmen. This characteristic explains the high rate of unemployment from which the industry periodically suffers. Again, apart from the effect of cyclical fluctuation of general business conditions, the construction industry is highly seasonal. In the winter there is a serious contraction, especially in outside operations, while in the other seasons the contractors employ a much larger number of men, casually engaged, than can be retained throughout the year. A considerable portion of the men are in no sense skilled artisans and the supply of unskilled men is generally in excess of the demand. Moreover, conditions in the industry are being transformed on account of the increasing substitution of reinforced concrete for wood and brick construction.

Relation of Construction Industry to General Business Conditions.—

Statistics showing activity in construction are of particular interest both to those engaged in the industry itself and to those concerned with the supplying of its raw materials, such as lumber, steel, cement, paint, glass and hardware. All of these latter industries are prosperous when the construction industry is active, and depressed when it is at a standstill; again, the effects of their activity and depression are felt throughout the whole field of industry, so that the current conditions in the construction industry react powerfully upon the whole economic life of the nation. Thus, in the period between 1909 and 1913, construction, largely financed with borrowed money, contributed in large measure to produce the "boom" of those years.

During the war period the industry was at a low ebb, except for the construction of munition plants, but after the war the housing shortage was a serious problem, and considerable building was undertaken in spite of the high cost of materials and of skilled labour. The urgent requirements due to the practical suspension of the industry during the war have now been fully met, and the decline in the value of contracts awarded in 1923 and 1924 would appear to be a normal development.

The growing recognition of the importance of the construction industry in the business cycle has led in recent years to the proposal that, since construction is largely carried on by public authorities, it should be stimulated by these authorities in periods of depression and suspended in "boom" periods, so as to contribute toward that stabilization of industrial conditions and of employment which is considered desirable. Thus, after the armistice, when a period of depression was apprehended, the shipbuilding programme of the Dominion Government provided employment for many thrown out of work by the stoppage of the munitions industry. Similarly, in the depression of 1921 and 1922, much employment was provided by the carrying into effect of the "good roads" programmes of the provincial Governments of Ontario and Quebec.

The construction industry as herein defined is made up of branches engaged in housebuilding and allied contracting, bridge-building, electrical contracting and shipbuilding. The value of the contracts awarded in the four classes during 1922 was \$112,252,616, while the cost of materials used was \$45,832,768, as compared with \$121,836,367 and \$45,439,960 respectively in 1921. (Table 1). The number of salaried employees and wage earners, together with the amount of salaries and wages paid, is given for both 1921 and 1922 in Table 2.

1.—Cost of Materials and Value of Products in the Construction Industries, as reported to the Industrial Census, 1921 and 1922.

Industries.	Number of establishments.		Cost of materials.		Value of products.		Value added by the industry.	
	1921.	1922.	1921.	1922.	1921.	1922.	1921.	1922.
			\$	\$	\$	\$	\$	\$
General construction	1,501	1,607	31,155,060	40,279,959	85,224,331	96,445,694	54,069,271	56,165,735
Electrical contracting	336	362	2,327,454	2,305,165	5,054,203	5,092,525	2,726,749	2,787,560
Bridge-building	14	5	5,971,417	1,464,125	12,048,774	3,168,243	6,077,357	1,704,118
Shipbuilding	38	38	5,986,029	1,783,519	19,509,059	7,546,154	13,523,030	5,762,635
Total	1,889	2,012	45,439,960	45,832,768	121,836,367	112,232,616	76,396,407	66,419,848

2.—Employees and Salaries and Wages in the Construction Industries, as reported to the Industrial Census, 1921 and 1922.

Industries.	Number of salaried employees.		Salaries.		Number of wage earners.		Wages.	
	1921.	1922.	1921.	1922.	1921.	1922.	1921.	1922.
			\$	\$			\$	\$
General construction	2,434	2,855	4,334,658	5,337,781	26,583	27,536	30,652,227	31,295,923
Electrical contracting	—	—	—	—	1,278	1,296	1,507,625	1,457,514
Bridge-building	456	180	1,020,564	400,006	1,576	595	2,279,097	689,082
Shipbuilding	451	364	1,164,425	802,012	5,293	2,838	7,316,737	2,946,796
Total	3,341	3,399	6,519,647	6,539,799	34,730	32,265	41,755,656	36,389,315

In the course of the census of industry, returns were received regarding the 1922 operations of 1,607 general contractors engaged in building and general construction. The value of the contracts executed by these firms was \$96,445,694. The value of the contracts completed by their sub-contractors was \$20,647,004. The total value of the contracts completed by the 1,607 concerns and their sub-contractors was \$117,092,698. The gross and net values of the contracts completed in four branches of the construction industry are given in Table 1, while the nature and the value of the work performed by the general contractors and their sub-contractors on the structures and works in question is given in detail in Table 3.

3.—Value of General Construction completed, by Classes of Work, 1921 and 1922.

Classes of works.	Value of works carried out.			
	1921.		1922.	
	New construction.	Total.	New construction.	Total.
	\$	\$	\$	\$
Buildings—				
Private premises, residential	14,988,676	20,125,863	19,333,112	24,448,982
Private premises, trade, business, etc.	21,092,377	24,678,746	24,472,936	28,722,058
Public premises, municipal and government	15,898,768	16,616,848	15,935,879	16,996,060
Places of public worship and buildings connected therewith	2,045,551	2,428,043	5,625,234	5,916,727
Construction, other than buildings—				
Highways and bridges, including roads, streets, walks and surface drains	14,492,107	15,667,476	14,363,438	15,774,751
Sewers and sewage disposal works	1,819,840	2,069,299	3,387,378	3,682,130
Tunnels, subways, culverts	211,678	212,878	261,624	262,424
Public conveniences, baths, playgrounds, etc.	107,669	107,759	53,496	55,596

**3.—Value of General Construction completed, by Classes of Work,
1921 and 1922—concluded.**

Classes of works.	Value of works carried out.			
	1921.		1922.	
	New construction.	Total.	New construction.	Total.
	\$	\$	\$	\$
Harbours and docks—				
Harbours, wharves, piers and jetties.....	3,488,643	3,671,053	5,703,914	5,821,377
Docks, wet and dry.....	1,933,392	1,969,859	1,415,544	1,440,342
Canals and waterways.....	3,372,819	3,389,715	3,157,641	3,158,211
Dredging.....	1,564,199	1,813,320	838,686	921,119
River and sea walls, embankments, etc.....	304,182	307,575	252,572	343,804
Miscellaneous—				
Waterworks, reservoirs (mains and service).....	2,186,006	2,195,663	2,006,390	2,090,365
Hydraulic works (mains and service).....	662,780	663,780	377,909	467,969
Gas works (mains and service).....	9,300	16,076	18,700	20,350
Land drainage works.....	683,610	701,605	814,044	816,813
Irrigation works.....	217,203	223,103	1,737,500	1,737,600
Mine shafts and adits.....	3,700	5,700	1,700	5,680
Electric lines and works, telephones, etc.....	459,145	527,880	301,964	336,478
Railway construction.....	3,715,768	4,756,361	2,041,898	2,321,682
Demolition.....	—	—	148,069	175,585
All other works.....	3,106,275	3,886,769	1,364,998	1,576,595
Total value of work done.....	92,363,688	106,033,371	103,615,126	117,092,698

NOTE.—The difference between value of new construction and total value of work done represents value of alterations, maintenance and repairs.

Construction in Transportation and Public Utility Industries.—The expenditure for construction by the transportation and public utility systems is incorporated in their general maintenance and structural accounts. The maintenance of way and structures account of the steam railways in 1923 totalled \$83,501,064, as compared with \$79,887,565 in 1922. There were 447¹ miles of new lines opened for operation during 1923, 36 miles completed but not opened for traffic, and 2,238 miles projected or under construction. Total track mileage in 1923 was 52,365, as compared with 52,273 in 1922, a net increase of 92 miles. The expenditure of electric railways on maintenance of way and structures account increased from \$3,877,482 in 1922 to \$4,233,164 in 1923. The length of their main line increased from 2,237.82 miles to 2,247.63, or by 9.81 miles.

As for the growth of the telephone systems of Canada, the pole line mileage increased from 184,147 in 1922 to 188,408 in 1923 and the wire mileage from 2,396,805 to 2,574,083 in the same period. The property and equipment account was \$167,332,932 in 1922 and \$162,502,365 in 1923.

The pole line mileage of the telegraph systems increased from 53,096 in 1922 to 53,383 in 1923, and the wire mileage, which was 262,343 in 1922, increased by 8,439 in the following year. The line and equipment account was \$1,507,016 in 1922 and \$1,539,739 in 1923.

Contracts awarded.—The total value of contracts for construction awarded in Canada during the calendar years 1919 to 1924 inclusive, according to the compilation of the MacLean Building Reports, Ltd., is given in Table 4.

¹ Gross: net new mileage in operation, 321.

4.—Value of Construction Contracts awarded in Canada, 1919-1924, according to the compilation of MacLean Building Reports, Ltd.

Distribution.	1919.	1920.	1921.	1922.	1923.	1924.
Geographical Division.						
Maritime.....	18,772,600	21,395,000	9,288,900	11,154,000	8,749,400	8,596,700
Ontario.....	87,356,800	108,120,800	113,855,000	166,628,000	156,151,800	136,041,400
Quebec.....	55,277,800	54,904,600	61,337,500	103,291,800	102,569,800	89,511,200
Western.....	28,621,100	78,185,100	55,651,900	50,770,000	46,783,300	42,111,800
Type of Building.						
Residential.....	47,015,100	54,891,100	76,655,400	104,201,500	97,645,200	91,224,800
Business.....	59,606,400	86,073,200	84,721,700	81,385,700	80,436,800	73,666,700
Industrial.....	57,091,300	64,625,900	16,503,700	25,755,800	27,022,000	21,765,000
Engineering.....	26,315,500	50,015,300	62,252,500	120,500,800	109,150,300	89,604,600
Total.....	199,028,300	255,605,500	240,133,300	331,843,800	314,254,300	276,261,100

Building Permits.—The anticipated value of construction in 35 Canadian cities, as indicated by their building permits, is shown in Table 5 for the years 1919 to 1924 inclusive. These cities had in 1921 a total population of 2,532,193, or about 28.8 p.c. of the total population of Canada. In 1924 the building permits were \$105,070,284, as against a total of contracts awarded, as shown in Table 4, of \$276,261,100 for Canada as a whole, or approximately 38 o.c. of the total estimated building.

5.—Values of Building Permits taken out in 35 Cities for the calendar years 1919-1924.

Cities.	1919.	1920.	1921.	1922.	1923.	1924.
Nova Scotia—	\$	\$	\$	\$	\$	\$
Halifax.....	5,194,805	3,421,379	2,199,398	1,752,632	378,699	731,209
Sydney.....	703,531	886,937	556,813	604,847	319,162	151,907
New Brunswick—						
Moncton.....	2,132,176	1,201,673	699,520	1,037,942	385,461	101,774
St. John.....	542,540	1,035,300	574,500	707,100	358,500	1,133,265
Quebec—						
Montreal—Maisonneuve...	10,033,901	14,067,609	21,291,273	21,132,586	27,125,863	31,013,419
Quebec.....	2,134,219	2,301,480	3,695,397	5,397,566	4,786,933	7,331,846
Sherbrooke.....	873,150	3,265,538	753,900	712,000	732,100	529,878
Three Rivers.....	1,242,450	845,975	1,286,740	1,193,650	780,735	1,046,210
Westmount.....	833,131	1,179,890	1,576,293	1,770,032	1,933,232	2,411,606
Ontario—						
Brantford.....	1,173,580	798,073	404,445	465,420	615,686	191,480
Fort William.....	627,930	1,045,160	893,050	1,446,685	1,425,130	1,272,570
Guelph.....	603,259	494,158	433,257	964,808	571,484	404,304
Hamilton.....	5,087,462	4,340,220	4,639,450	4,928,465	5,452,930	3,309,800
Kingston.....	657,679	494,736	591,515	701,495	649,233	1,035,620
Kitchener.....	1,176,962	1,277,595	932,050	2,461,321	1,893,892	1,221,122
London.....	2,455,170	2,146,305	2,527,510	2,605,630	3,261,065	2,113,500
Ottawa.....	3,252,322	3,305,177	2,716,409	5,021,782	3,521,817	2,540,699
Peterborough.....	196,368	939,700	541,754	439,154	295,798	437,510
Port Arthur.....	1,708,845	216,350	113,509	1,167,429	2,640,321	1,186,207
Stratford.....	278,888	440,782	276,089	700,527	509,272	641,619
St. Catharines.....	861,636	830,632	776,360	1,290,576	806,310	713,638
St. Thomas.....	285,525	258,821	113,640	221,964	334,239	164,026
Toronto.....	19,617,838	25,737,063	23,878,246	35,237,925	30,609,227	23,926,028
Windsor.....	2,601,370	4,850,310	5,123,110	4,143,495	4,725,034	4,429,308
Manitoba—						
Brandon.....	98,541	412,829	749,190	225,029	183,034	270,825
Winnipeg.....	2,948,000	8,370,150	5,580,400	6,875,750	4,484,100	3,177,900
Saskatchewan—						
Moose Jaw.....	590,895	1,533,095	500,177	379,180	289,398	501,129
Regina.....	1,699,020	2,597,920	2,160,038	1,784,124	1,264,030	959,785
Saskatoon.....	1,404,590	1,150,585	774,466	1,818,909	852,548	1,415,276
Alberta—						
Calgary.....	2,212,000	2,906,100	2,298,800	3,102,700	821,840	1,031,420
Edmonton.....	931,346	3,231,955	1,563,696	2,338,109	1,488,670	2,305,095
British Columbia—						
New Westminster.....	166,282	319,109	264,870	332,050	350,848	321,432
Vancouver.....	2,271,411	3,569,666	3,045,132	8,661,695	6,277,574	6,230,774
Victoria.....	466,591	1,207,572	977,167	1,033,004	1,050,160	838,103
Total 35 Cities.....	77,113,413	100,679,839	94,508,164	122,655,581	111,174,325	105,070,284

VIII.—TRADE AND COMMERCE.

This section of the Canada Year Book is divided broadly into two sub-sections dealing respectively with external and internal trade. The first of these commences with a short history of Canadian external trade, the Canadian tariff, and recent developments in external trade. This is followed by 9 tables showing the historical development of Canadian external trade, and these again by numerous tables constituting a study of current external trade for post-war fiscal years, analysing exports and imports by groups, by articles, by degree of manufacture, by purpose for which commodities are used, and by countries of shipment or of destination. In view of the specially close trade relations between Canada and the West Indies, whose products are in so many cases complementary to our own, the sub-section continues with a historical and "current trend" study of our West Indian trade, and concludes with a table compiled from British trade reports, showing for recent years the agricultural commodities supplied by Canada and various competing countries to the great world-market of the United Kingdom.

The sub-section on Internal Trade commences with an analysis of grain trade statistics, followed by a treatment of the marketing of live stock and animal products. Statistics of commodities in cold storage are given, together with figures of the coal trade, and the sub-section is brought to a conclusion by a statistical treatment of bounties, patents, copyrights and trade marks.

I.—EXTERNAL TRADE.

1.—Historical Sketch of External Trade and Tariffs.

In the early history of the American continent each of the different European nations establishing settlements in the New World endeavoured to monopolize the commerce of its colonies, prohibited the ships of other nations from resorting to them, and prohibited its colonials from importing European goods from other countries, generally granting them, however, preferential treatment in its own market. Under these circumstances the colonial wars in America were carried on, by governments permeated by the mercantile spirit, for "ships, colonies and commerce." Owing to this fact, wars resulting in the transfer of colonies from one European power to another involved great economic as well as political changes in the community so transferred. The traders who had previously controlled the trade between the colonial power and its colony found their occupations gone, while new traders from the conquering state arrived to take over the import and export trade, which thereafter flowed in new channels, perhaps no more artificial than those which had previously existed.

Throughout the earlier part of the French *régime* in Canada, the foreign trade of the colony was in the hands of the monopolistic chartered companies, of which the Company of One Hundred Associates was the most notable. When its monopoly was cancelled in 1663, the foreign trade of Canada still remained a preserve of the merchants of Old France. Upon the conquest of the country by the British, the French merchants who had their offices in Quebec and Montreal for the most part returned to France, and the trade of the colony fell into the hands of the traders from England, Scotland and New England, who had swarmed into the country upon the heels of the invading armies. Some of their descendants are still among the leaders in Canadian import and export trade.

For the first half-century of British rule, Canadian commerce was carried on almost exclusively with or through the United Kingdom, the merchants of New England complaining, after the American Revolution, of being shut out from the Canadian trade. The geographical juxtaposition of the United States to British North America was, however, a factor which could not permanently be ignored, and smuggling became more and more prevalent as the process of settlement extended westward along the international boundary. In 1822 Great Britain made considerable trading concessions to United States traders. In 1846 she abolished the preferential treatment which she had given to Canadian wheat, and by 1860 all vestige of preference to colonial products had disappeared from the British tariff. As a consequence, the colonies which, like Canada, were by this time enjoying responsible government, could not any longer be refused the right to control their own commercial policy—a fact which was emphasized in an important report prepared in 1859 by the Minister of Finance, Sir A. T. Galt, and forwarded to the British Government. This report declared that the responsibility of the Canadian Government must be to the Canadian people, more especially in matters of taxation (the greater part of the revenue being raised by customs duties), and that the Canadian Government must affirm the right of the Canadian Parliament to adjust the taxation of the people in the way it deemed best, even if this should happen to meet with the disapproval of the British Ministry. This doctrine remained unchallenged by the British Government, and coming at a time when all important parties in Great Britain had accepted free trade as a *fait accompli*, it facilitated the setting up of a protective tariff in Canada, designed to secure the establishment in Canada of manufacturing industries, at a time when British opinion desired that the colonies should concentrate their attention on the production of food and raw materials, importing from Great Britain the manufactured commodities which they required.

The Abolition of Preference and the Reciprocity Treaty of 1854.—The abolition of the British preference to Canadian wheat in 1846 brought about a depression in the flour-milling industry of Montreal and an ephemeral agitation for union with the United States. The effects of the repeal of the preference were, however, mitigated in 1849 by the repeal of the Navigation Acts and the throwing open of the carrying trade between Canada and the United Kingdom to the shipping of the world. Meanwhile, the abandonment of protection in the Mother Country led to the initiating of negotiations for a reciprocity treaty with the United States; a treaty for the free exchange of natural products between them and the British North American colonies was negotiated in 1854, and became effective on Mar. 16, 1855. Under its terms the Canadian farmer and fisherman derived considerable benefit, more especially during the period of the Civil War, when prices in the United States were particularly high. Partly as a consequence of the friction between Great Britain and the United States during the Civil War period, and partly because the new Canadian tariff shut out the manufactured goods of the United States, the treaty was denounced at the end of the 10-year period for which it had been negotiated, and ceased to operate 12 months later on Mar. 17, 1866. The denunciation of the treaty had a considerable effect in bringing about the Confederation of the British North American colonies, which it was hoped would to a great extent absorb each other's products.

Tariff Policy Since Confederation.—The immediate effect of Confederation was to abolish the tariff barriers which existed between the provinces entering the Dominion. As the area of Canada increased until, except for Newfoundland and Labrador, it became conterminous with British North America, the area of internal

free trade was thereby extended, while protection against outside competition was generally maintained. However, the protective tariff of the old province, which had been adopted in 1859 with a prevailing rate of 20 p.c., was replaced in 1866 by a tariff assimilated to the revenue tariffs of the Maritime Provinces, with the rates of duties on the great bulk of manufactured commodities reduced from 20 and 25 p.c. to 15 p.c. However, the world-wide depression which commenced in 1873, and the consequent falling off in a revenue based upon trade, necessitated an increase of the general rate to $17\frac{1}{2}$ p.c., with a 20 p.c. rate on certain luxuries. Even this increase failed to fill the treasury.

In 1879, after the people had declared for a protective policy in the general election of 1878, the duties on imported manufactured goods were considerably increased, the rate on goods not otherwise provided for being raised from $17\frac{1}{2}$ p.c. to 20 p.c., the rates on cotton goods from $17\frac{1}{2}$ p.c. to rates, specific and *ad valorem*, equivalent on the importations of 1881 to 30 p.c., while the duties on woollens were practically doubled. The rate on furniture and clocks was increased to 35 p.c.; on carriages, glassware, wall-paper and silks to 30 p.c.; on boots and shoes, buttons, rubber goods and woodenware to 25 p.c. Pig iron, previously free, now paid \$2 a ton, and the duty on iron billets, bars and rods was increased from 5 p.c. to 10 and $17\frac{1}{2}$ p.c., while manufactured iron and steel products and machinery were given 25 to 35 p.c. protection. Throughout the 80's the general trend of the minor revisions made in the tariff was still upwards, but in the 90's a downward tendency became manifest. In 1891 the duty on raw sugar was repealed, and in 1894 material reductions were made on agricultural implements, and minor readjustments on cottons and woollens. This period was also marked by the thorough-going extension of protection to the iron and steel industry, both by customs duties and bounties.

In the tariff revision of 1897, the duties on Indian corn, binder-twine, barbed wire, pig iron, flour and refined sugar were reduced or abolished, while the bounties on domestic pig iron were not reduced, but in certain cases increased. But the most distinctive feature of the tariff revision of 1897 was the adoption of what was called a "reciprocal" tariff, one-eighth lower than the general. This "reciprocal" tariff was at once applied to the United Kingdom, and afterwards to New South Wales and to British India, while Belgium and Germany, in virtue of their trade treaties with Great Britain, were also admitted to the benefits of the "reciprocal" tariff, together with Argentina, Austria-Hungary, Bolivia, Colombia, Denmark, Persia, Russia, Sweden, Switzerland, Tunis and Venezuela, on account of most-favoured-nation treaties between these countries and Great Britain, and France and her colonies in consequence of the Franco-Canadian treaty of 1893. A little later the "reciprocal" tariff was extended to the Netherlands, Japan, Siberia, Morocco, Salvador, South African Republic, Tonga and Spain, also under most-favoured-nation treaties between these countries and the United Kingdom.

The numerous concessions mentioned above were, however, of a merely temporary character, ceasing to exist in 1898 as a consequence of the denunciation by Great Britain of her most-favoured-nation treaties with Germany and Belgium. This left Canada free to confine her lower tariff rates to the United Kingdom and to sister Dominions and colonies. A British preferential tariff, consisting at first of a remission of 25 p.c. of the duty ordinarily paid (Aug. 1, 1898), and later of a remission of $33\frac{1}{3}$ p.c. of the ordinary rate of duty (July 1, 1900) was established. This method of preference was abandoned in 1904 for a specially low rate of duty on almost all imported dutiable commodities.

Customs Tariff of 1907.—In 1907 a new customs tariff was introduced, establishing three scales of duties, British preferential (the lowest), intermediate and general, the intermediate tariff being set up as a basis for negotiation with foreign countries in the interest of Canadian trade. This tariff of 1907 is still in operation, with modifications. Under it, the British preferential tariff applied in 1924 to nearly the whole of the British Empire except Australia and Newfoundland, while to the British West Indies, under an agreement of June, 1920, rates of duties are granted even lower than those of the ordinary preferential tariff—in nearly all cases a remission of 50 p.c. of the duty ordinarily charged. The regular British preference was further increased in 1923 (13-14 Geo. V, c. 42) by a discount of 10 p.c. of the amount of duty computed under the British preference tariff, when goods paying 15 p.c. duty or over are conveyed without transshipment from a port of a country enjoying the British preferential tariff into a sea or river port of Canada.

The intermediate tariff applied in 1923 to the products of the following countries: France, her colonies and protectorates, Belgium, Italy and the Netherlands (all these under special treaties), Argentine Republic, Colombia, Denmark, Japan, Norway, Russia, Spain, Sweden, Switzerland and Venezuela (under reciprocal most-favoured-nation clause treatment).

The general tariff is in force with respect to the products of all other foreign countries. There is also in the Canadian customs tariff an anti-dumping clause, providing that in the case of imported articles of a kind made or produced in Canada, if the export or selling price to the Canadian importer is less than the fair market value in the country whence imported, there shall be levied, in addition to the duties otherwise payable, a special duty according to the difference between the selling price for export and the fair market value for home consumption, but such special duty shall not exceed 15 p.c. *ad valorem*, nor be levied on goods when the normal duties are 50 p.c. *ad valorem*, nor on goods subject to excise duties.

Drawbacks of 99 p.c. of duties paid on imported materials are allowed by the customs laws and regulations in cases where articles manufactured from such materials are afterwards exported.

New commercial treaties with France (including her colonies and protectorates) and Italy were approved at the 1923 session of Parliament (13-14 Geo. V, c. 14, c. 17), and a commercial convention with Belgium at the 1924 session (14-15 Geo. V, c. 9).

Surtax.—In 1903, the Customs Tariff Act of 1897 was amended to provide for a surtax of one-third of the duty on goods the product of any foreign country which treats imports from Canada less favourably than those from other countries. This surtax was at once applied against German goods, but was removed on March 1, 1910, when Canada obtained conventional rates of the German tariff on a specified list of goods. Under the Customs Tariff Act of 1914, the rate of surtax was left to be fixed in each case by the Governor in Council, but was not to exceed 20 p.c. *ad valorem*. The surtax may also be applied to goods ordinarily on the free list, but is not to exceed 20 p.c. *ad valorem*.

2.—The Commercial Intelligence Service.

The Commercial Intelligence Service, maintained by the Department of Trade and Commerce, is designed to further the interests of Canadian trade in other parts of the Empire and in foreign countries. To this end there are established throughout the world offices administered by Trade Commissioners. These Trade Commissioners make periodical reports upon trade and financial conditions, variations in

markets, and the current demand or opportunities for Canadian products. They also secure and forward to the Department in Ottawa specific inquiries for Canadian goods and in general exert their best efforts for the development and expansion of overseas markets. These reports, inquiries, etc., are published weekly in the *Commercial Intelligence Journal*, issued by the Commercial Intelligence Service at Ottawa, the subscription to which is \$1 per annum, for Canadian manufacturers and others interested.

Canadian Government Trade Commissioners are stationed in the United Kingdom at London, Liverpool, Bristol and Glasgow and at Dublin in the Irish Free State. They are also located at Port-of-Spain, Trinidad; Kingston, Jamaica; Buenos Aires; Rio de Janeiro; Shanghai; Havana; Paris; Brussels; Hamburg; Rotterdam; Milan; Kobe; Melbourne; Auckland, New Zealand; Cape Town; Calcutta; Singapore and New York. There is also a Canadian Commercial Agent in Sydney, N.S.W. Under an arrangement made by the Minister of Trade and Commerce of the Dominion of Canada with the British Foreign Office, Canadian manufacturers, exporters and others interested in trade matters may secure information and advice from British commercial diplomatic officers and British Consuls in all countries in which Canada is not represented by her own Commercial Intelligence Service.

3.—Statistics of External Trade.

Interpretation of Trade Statistics.—In the consideration of the foreign trade statistics of Canada, certain facts should be borne in mind. First, statistics are given since 1907 for the fiscal years ended March 31 and prior to that for the fiscal years ended June 30. Secondly, imports mean always "imports for consumption"; this term does not necessarily imply that the goods have been actually consumed in Canada, but only that they have passed into the possession of the importer; the value given for goods imported is the fair market value thereof when sold for home consumption on the principal markets of the country whence and at the time when the goods were exported to Canada. Thirdly, the term "Canadian produce" includes all imported articles which have been changed in form or enhanced in value by further manufacture in Canada, such as sugar refined in Canada from imported raw sugar, flour ground from imported wheat and articles constructed or manufactured from imported materials; the value of "Canadian produce" is its value at the time of exportation at the Canadian ports from which it is shipped. Fourthly, the term "foreign produce" applies to the exports of foreign goods which have previously been imported (re-exports); the value of "foreign produce" is the actual cost of the goods.

1.—Historical Statistics.

A general view of the aggregate trade of Canada for the years from 1868 to 1924 is furnished in Table 1, giving the imports of merchandise for home consumption, dutiable and free, and the exports of Canadian and foreign produce, the total trade as here given being the aggregate of the two. Necessarily, some difficulties have been met in maintaining comparable statistics through such a length of time, one of the most serious of these arising through different methods adopted in dealing with exports of foreign produce. For example, the shrinkage in the exports of foreign produce between 1919 and 1924 has been due to change of statistical method rather than to actual diminution in value or volume of such goods exported. For the past four years, re-exports of foreign products from bonded warehouses have no longer been included in Canadian trade statistics either as imports or as exports, while

the exports of foreign produce have, during this period, been composed of goods which had previously been entered as imports for home consumption. Such goods, therefore, are shown as debited to Canada when entering this country, and should, therefore, be credited to Canada when re-exported. Consequently, in determining our visible balance of trade for the last four years in Table 2, it has been necessary to set off the total exports against the imports for home consumption. The same table gives the per capita imports for home consumption and exports of Canadian produce since Confederation.

From Table 2 it will be observed that in most of the years from Confederation to the outbreak of the Great War, imports entered for consumption exceeded total exports, especially during the great growing period from 1904 to 1914. During the past decade, except in the fiscal year ended March, 1921, there has been an annual excess of total exports over imports entered for consumption. For the fiscal year ended 1915, the total exports were 101·20 p.c., for 1916, 153·34 p.c., for 1917, 139·31 p.c., for 1918, 164·62 p.c., for 1919, 137·95 p.c., for 1920, 120·87 p.c., for 1921, 97·60 p.c., for 1922, 100·82 p.c., for 1923, 117·78 p.c. and for 1924, 118·49 p.c. of the imports for home consumption.

The values of coin and bullion imported and exported, these movements from 1914 on representing fiduciary transactions rather than trading exchanges, are shown in Table 3. Amounts collected in export duties from 1868 to 1892, and in import duties from 1868 to 1924, are stated by years in Table 4. Tables 5 and 6 give the statistics of our exports of Canadian produce and our imports for home consumption respectively, furnishing figures of our trade with the United Kingdom, United States and other countries since 1868. These figures show the overwhelming predominance of the two great English-speaking countries in our foreign trade; in the fiscal year ended March 31, 1924, for example, 75·7 p.c. of our exports of domestic produce was shipped to these two countries, which in the same year together provided 84·5 p.c. of our imports for home consumption. Tables 7 and 8 show respectively by years the percentage proportions of imports from the United Kingdom and the United States to totals of dutiable and free imports since 1901, and the *ad valorem* rates of duty collected on imports from these and from all countries from 1868.

Importations of important raw materials used in Canadian manufacturing industries are given in Table 9 for the years 1902 to 1924.

2.—Current Trade Statistics.

Canada's external trade, in common with that of every other country in the world, suffered a severe decline in volume and value following the war. Owing to lower prices, the reduction in the values was much greater proportionately than the decline in the volume. Although the effect of price changes on the values of foreign trade cannot be exactly determined, it is certain that, if the same prices had prevailed during the fiscal year ended 1924 as ruled during 1921, the total value of Canada's external trade would have been greater during the fiscal year 1923-24 than in 1920-21. In other words, in the fiscal year ended 1924, a new high record has been established in the Dominion's normal international commerce. While exports reached the billion dollar figure during each year from 1917 to 1921, this was achieved under abnormal war-time demands or the peak prices of the *post bellum* boom, and thus cannot be considered a reliable index of the expansion of the country's productive powers. For the fiscal year 1924, Canada's domestic exports reached a total of \$1,045,100,000 and foreign exports previously entered for consumption \$13,400,000,

making a total export of \$1,058,500,000. Inasmuch as during the same period the imports amounted to \$893,400,000, the Dominion's favourable trade balance was more than \$165,000,000. Comparing the figures with those of 1914, the exports of Canadian produce in 1924 show an increase of \$613,500,000, or 142 p.c., and the imports an increase of \$274,200,000, or 44 p.c., while during the same interval the trade balance shows a betterment of \$328,900,000.

The statistics in the following table indicate the trend of Canadian trade from 1914 to 1924, (a) with all countries; (b) with the United Kingdom; and (c) with the United States.

(Values in Millions of Dollars).

Years ended March 31.	Imports into Canada.				Exports from Canada.			Excess of Imports (i) or Exports (e).	Percentage relation of Exports to Imports.
	Dutiable Goods.	Free Goods.	Total Im- ports.	Per cent Free.	Canadian Produce.	Foreign Pro- duce.	Total Ex- ports.		

(a) With All Countries.

	\$	\$	\$	\$	\$	\$	\$	\$	p.c.
1914.....	410.3	208.9	619.2	33.7	431.6	23.8	455.4	(i) 163.8	73.5
1915.....	279.8	176.1	455.9	38.6	409.4	52.0	461.4	(e) 5.5	101.2
1916.....	289.4	218.8	508.2	43.0	741.6	37.7	779.3	(e) 271.1	153.3
1917.....	461.7	384.7	846.4	45.4	1,151.4	27.8	1,179.2	(e) 332.8	139.3
1918.....	542.3	421.2	963.5	43.7	1,540.0	46.1	1,586.1	(e) 622.6	164.6
1919.....	526.5	393.2	919.7	42.7	1,216.4	52.3	1,268.7	(e) 349.0	137.9
1920.....	693.6	370.9	1,064.5	34.8	1,239.5	47.1	1,286.6	(e) 222.1	120.9
1921.....	847.5	392.6	1,240.1	31.6	1,189.2	21.2	1,210.4	(i) 29.7	97.6
1922.....	495.6	252.2	747.8	33.7	740.2	13.7	753.9	(e) 6.1	100.8
1923.....	537.3	265.3	802.6	33.0	931.5	13.8	945.3	(e) 142.7	117.7
1924.....	591.2	302.2	893.4	33.8	1,045.1	13.4	1,058.5	(e) 165.1	118.5

(b) With United Kingdom.

1914.....	102.4	29.7	132.1	22.5	215.2	7.1	222.3	(e) 90.2	167.5
1915.....	68.0	22.1	90.1	24.5	186.6	25.1	211.7	(e) 121.6	234.9
1916.....	52.0	25.4	77.4	32.8	451.9	11.2	463.1	(e) 385.7	598.3
1917.....	75.5	31.6	107.1	29.5	742.1	13.9	756.0	(e) 648.9	705.9
1918.....	58.0	23.3	81.3	28.6	845.5	15.6	861.1	(e) 779.8	1,059.1
1919.....	50.0	23.0	73.0	31.5	540.7	20.1	560.8	(e) 487.8	768.2
1920.....	93.2	33.1	126.3	26.2	489.2	6.8	496.0	(e) 369.7	392.7
1921.....	170.1	43.8	213.9	20.5	312.8	1.4	314.2	(e) 100.3	146.9
1922.....	95.1	22.0	117.1	18.8	299.4	1.0	300.4	(e) 183.3	256.5
1923.....	116.2	25.1	141.3	17.7	379.1	0.8	379.9	(e) 238.6	268.8
1924.....	126.1	27.5	153.6	17.8	360.1	1.1	361.2	(e) 207.6	235.1

(c) With United States.

1914.....	249.5	146.8	396.3	37.0	163.4	13.6	177.0	(i) 219.3	44.6
1915.....	168.6	128.5	297.1	43.2	173.3	13.0	186.3	(i) 110.8	62.7
1916.....	199.5	171.4	370.9	46.2	201.1	15.6	216.7	(i) 154.2	58.4
1917.....	332.0	333.3	665.3	50.1	280.6	10.0	290.6	(i) 374.7	43.7
1918.....	429.3	365.6	792.9	45.8	417.2	23.6	440.8	(i) 352.1	55.6
1919.....	416.5	335.7	750.2	44.5	454.9	22.8	477.7	(i) 272.5	63.7
1920.....	499.7	301.4	801.1	37.6	464.0	37.1	501.1	(i) 300.0	62.5
1921.....	544.0	312.2	856.2	36.5	542.3	18.4	560.7	(i) 295.5	65.5
1922.....	312.1	203.9	516.0	39.5	292.6	11.5	304.1	(i) 211.9	58.9
1923.....	332.2	208.8	541.0	38.6	369.1	11.2	380.3	(i) 160.7	70.3
1924.....	355.8	245.5	601.3	40.8	430.7	10.9	441.6	(i) 159.7	73.4

Visible Balance of Trade.—The fiscal year ended March 31, 1922, marked the post-war low point in Canadian trade, the total being the lowest since 1916. Nevertheless, exports so far overhauled imports that the unfavourable balance of \$29,730,763 in 1921 was converted into a favourable balance amounting to \$6,122,677, which was increased to \$142,716,593 and \$165,186,430 respectively, for the fiscal years ended 1923 and 1924.

This improvement in the trade situation is reflected in the increased power of the Canadian dollar in exchange. During the calendar year 1920 it took on the average 112 Canadian cents to purchase 100 United States cents, but in 1923 the Canadian dollar was almost on a par with the United States dollar, 102 Canadian cents on the average being equal to 100 United States cents.

Comparison of Pre-war and Post-war Trade by Groups.—In the table below it will be seen that Canada's exports have increased during the past decade by 142·4 p.c., while her imports have increased by only 44·2 p.c. Two groups, agricultural and vegetable products, and wood and paper, have contributed the bulk of the great increase in exports and together constituted slightly over two-thirds of the total. The growth of the exports in the wood and paper group during the decade was especially remarkable, the 1924 exports being 432 p.c. of the 1914 exports, while the same percentage of growth was realized in the iron and products group, though this started out from a much smaller base. Exports in the fibres and textiles group quadrupled in the decade, and those in the chemicals and products and in the miscellaneous group more than trebled, while the non-metallic minerals nearly trebled in the 10-year period.

On the import side, the highest percentage of increase was attained by agricultural and vegetable products, this being in part due to the higher prices and greater consumption of sugar, tropical fruits and other commodities which cannot be produced in Canada. Imports of non-metallic minerals increased by nearly 83 p.c. in the decade, largely owing to the higher prices of imported coal. Imports in the fibres and textiles group also showed a very considerable increase of 59 p.c.

Comparison of Canada's Trade by Main Groups, 1914 and 1924.

(Values in Millions of Dollars).

Main Groups.	Imports.		Exports.		Ratio.			
					Imports.		Exports.	
	1914.	1924.	1914.	1924.	1914.	1924.	1914.	1924.
	\$	\$	\$	\$	p.c.	p.c.	p.c.	p.c.
Agricultural and vegetable products.....	97·6	186·5	201·2	430·9	100	191·0	100	214·2
Animals and products.....	41·1	45·0	76·6	140·4	100	109·5	100	183·3
Fibres and textiles.....	109·2	173·8	1·9	8·1	100	159·1	100	426·3
Wood and paper.....	37·4	41·0	63·2	273·3	100	109·9	100	432·4
Iron and products.....	143·8	173·5	15·5	67·0	100	120·6	100	432·2
Non-ferrous metals.....	35·6	43·4	53·3	65·9	100	121·9	100	123·6
Non-metallic minerals.....	85·3	155·9	9·3	26·8	100	182·8	100	288·2
Chemicals and products.....	17·1	26·1	4·9	15·3	100	152·6	100	312·2
Miscellaneous.....	52·1	48·2	5·7	17·4	100	92·5	100	305·3
Total.....	619·2	893·4	431·6	1,045·1	100	144·2	100	242·4

Distribution of Canadian Trade by Continents.—With reference to the geographical distribution of Canada's trade, the table below shows that the continents of Europe and North America took 89·6 p.c. of the Dominion's exports during the fiscal year 1924, the proportion shipped to each continent being 44·8 p.c., while they furnished Canada with 94·2 p.c. of her imports, the proportion received from North America amounting to 71·6 p.c. and from Europe to 22·6 p.c.

Trade of Canada, by Continents, 1924.

(And proportion of trade with each continent).

Continents.	Imports.		Exports.	
	Value.	p.c. of total.	Value.	p.c. of total.
	\$	p.c.	\$	p.c.
Europe—				
United Kingdom.....	153,613,003	17.2	360,094,021	34.5
Other Europe.....	48,180,762	5.4	107,563,208	10.3
North America—				
United States.....	601,295,121	67.3	430,715,496	41.2
Other North America.....	38,726,299	4.3	37,657,067	3.6
South America.....	16,801,984	1.9	15,655,120	1.5
Asia.....	30,404,857	3.4	49,878,888	4.8
Oceania.....	3,502,992	0.4	33,476,527	3.2
Africa.....	841,849	0.1	10,100,729	0.9
Total.....	893,366,867	100.0	1,045,141,056	100.0

Distribution of Canadian Imports by Countries.—The United States holds first place in Canada's import trade by a very wide margin. In 1924 the imports from the United States amounted to \$601,295,121, or 67.3 p.c. of the total. Next in order of importance were: United Kingdom \$153,613,003 or 17.2 p.c.; France \$15,770,145 or 1.8 p.c.; British East Indies \$14,374,888 or 1.6 p.c.; British West Indies \$13,819,291 or 1.5 p.c.; Cuba \$10,781,047 or 1.2 p.c.; Santo Domingo \$8,800,060 or 1.0 p.c.; Switzerland \$8,420,673 or 0.9 p.c.; Japan \$6,292,867 or 0.7 p.c.; Netherlands \$5,360,344 or 0.6 p.c.; Germany \$5,379,955 or 0.6 p.c.; Belgium \$5,340,875 or 0.6 p.c.; and Argentina \$4,173,562 or 0.5 p.c. Compared with the pre-war year 1914, the imports in 1924 from the United States show an increase of 51.7 p.c.; from United Kingdom 16.3 p.c.; from France 10.5 p.c.; from British East Indies 100.0 p.c.; from British West Indies 220.9 p.c.; from Cuba 170.0 p.c.; from Santo Domingo 203.4 p.c.; from Switzerland 95.3 p.c.; from Japan 142.3 p.c.; from Netherlands 80.0 p.c.; from Belgium 17.7 p.c.; and from Argentina 61.5 p.c. The imports from Germany in 1924 show a decrease of 63.0 p.c. as compared with 1914.

Distribution of Canadian Exports by Countries.—The United States is Canada's best customer, notwithstanding the effect of the Fordney-McCumber tariff on the Dominion's exports. The exports of Canadian products to the United States in 1924 amounted to \$430,715,496 or 41.2 p.c. of the Dominion's exports. Next in order of importance were: United Kingdom \$360,094,021 or 34.5 p.c.; Japan \$26,931,860 or 2.6 p.c.; Australia \$19,923,997 or 1.9 p.c.; France \$18,879,097 or 1.8 p.c.; Italy \$18,501,578 or 1.8 p.c.; Belgium \$17,452,442 or 1.7 p.c.; Germany \$16,153,650 or 1.6 p.c.; China \$12,973,145 or 1.2 p.c.; New Zealand \$12,735,620 or 1.2 p.c.; British West Indies \$10,901,712 or 1.0 p.c.; Newfoundland \$10,507,868 or 1.0 p.c.; Netherlands \$9,488,976 or 0.9 p.c.; Argentina \$7,305,866 or 0.7 p.c.; and Cuba \$6,776,605 or 0.6 p.c. Comparing 1924 with 1914, Canada's exports to the United States show an increase of 163.6 p.c.; to United Kingdom 67.3 p.c.; to Japan 1581.2 p.c.; to Australia 323.4 p.c.; to France 425.0 p.c.; to Italy 3600.0 p.c.; to Belgium 304.6 p.c.; to Germany 299.4 p.c.; to China 2642.7 p.c.; to New Zealand 568.4 p.c.; to British West Indies 142.2 p.c.; to Newfoundland 133.3 p.c.; to Netherlands 137.5 p.c.; to Argentina 247.6 p.c.; and to Cuba 277.7 p.c.

Relation of Canadian and U.S. Manufactures to External Trade.—The variety and capacity of Canada's manufacturing industries are constantly increasing. Numerous commodities consumed in Canada that, a few years

ago, were wholly imported, are now produced in the country in sufficient volume for the home demand and are also being exported in quantity, while certain very large manufactories are chiefly engaged in supplying foreign markets. No statistics are as yet available to show what proportion of Canada's imports and exports for the fiscal year 1924 was raw materials, partly manufactured or fully manufactured goods. Statistics appear in tabulated form below setting forth this information not only for Canada, but also for the United States, for certain years from 1900 to 1923. The table indicates that the products of the manufacturing industries of Canada and the United States are gradually displacing in their respective countries partly and fully manufactured goods which were formerly imported. Both countries are importing more raw materials for their industries than formerly. Canada's imports of raw materials in 1923 amounted to 28.4 p.c. of her total imports, while raw materials constituted 48.3 p.c. of the imports into the United States. It is evident, therefore, that Canada is not as dependent on foreign countries for her supply of raw materials as is the United States. While it is true that Canada continues to export large quantities of raw materials, it is a notable fact that the increase in the quantities of raw materials used in her manufacturing industries in recent years is much greater than the increase in the exports of these products. Just prior to the war, the proportion of fully manufactured products imported into Canada was 68.9 p.c. of her total imports and into the United States 36.6 p.c., but in 1923 the proportion for Canada was 61.9 p.c. and for the United States 32.9 p.c.

Years.	Raw Materials.				Partly Manufactured.				Fully Manufactured.			
	Imports.		Exports.		Imports.		Exports.		Imports.		Exports.	
	Can.	U.S.	Can.	U.S.	Can.	U.S.	Can.	U.S.	Can.	U.S.	Can.	U.S.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
1900	24.9	44.0	41.5	40.2	10.6	15.8	17.7	11.2	64.5	40.2	40.8	48.6
1910	24.2	45.7	51.2	39.5	10.0	18.3	16.1	15.7	65.8	36.0	32.7	44.8
1914	21.8	46.5	63.2	39.9	9.3	16.9	10.1	16.1	68.9	36.6	26.7	44.0
1920	27.5	52.8	35.7	32.6	13.2	15.3	15.1	12.5	59.3	31.9	49.2	54.9
1921	24.9	41.1	44.2	35.5	11.7	14.8	16.6	10.3	63.4	44.1	39.2	54.2
1922	28.9	46.4	44.5	39.1	9.6	15.6	14.5	11.1	61.5	38.0	41.0	49.8
1923	28.4	48.3	44.7	36.3	9.	18.8	16.2	12.5	61.9	32.9	39.1	51.2

Canada's Place in International Trade.—Since 1913 Canada has materially improved her position among the leading commercial countries of the world. The sub-joined tabulation of the trade of the principal countries of the world for the calendar years 1913 and 1923 shows that, with respect to imports, Canada occupied eighth place among the principal importing countries in 1913, whereas in 1923 she had advanced to sixth place, being surpassed by the United Kingdom, United States, France, Germany and Japan, in the order given. In percentage of increase in import trade during the decade 1913 to 1923, Canada occupied twelfth place. In imports per capita Canada stood in fifth position in 1913 and sixth position in

1923. Canada occupied tenth place as an exporting country in 1913 but in 1923 she occupied sixth place, being surpassed by the United States, United Kingdom, France, Germany and British India. During the decade Canada's increase in export trade was 132.6 p.c. The only country to surpass this record was the Union of South Africa, with an increase of 154.8 p.c. In respect to exports per capita, Canada stood in seventh place in 1913, but in 1923 she occupied second position, conceding first place to the Dominion of New Zealand. Though Canada, in 1923, in both imports and exports, occupied sixth place among the principal trading countries of the world, she held fifth position in respect to aggregate trade, coming immediately after the four greatest traders of the world, the United Kingdom, the United States, France and Germany, each of which has from four to twelve times the population of the Dominion.

Comparison of the Trade of the Principal Countries of the World (Calendar Years 1913 and 1923).

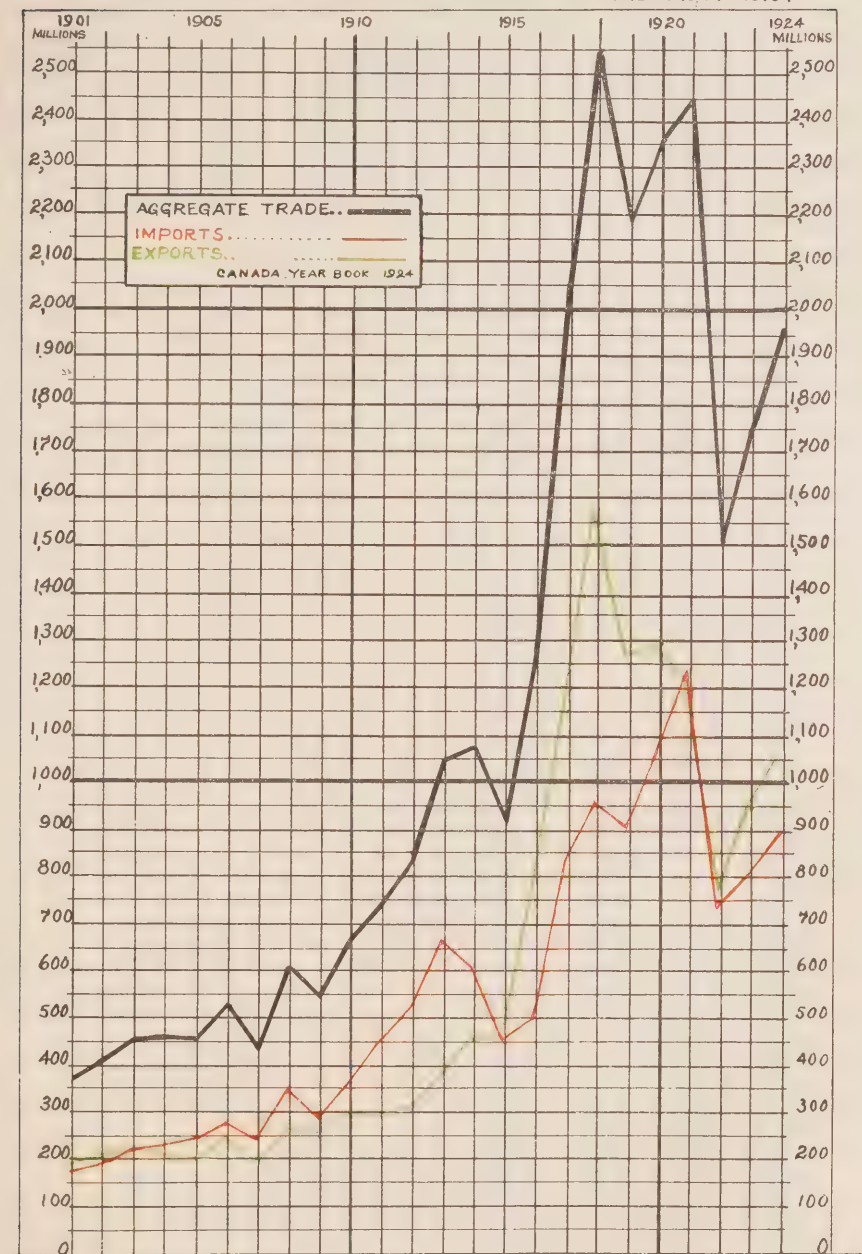
Countries.	Foreign Trade.		Inc. (i) or Dec. (d), 1923 compared with 1913.		Trade per Capita.	
	1913.	1923.	Amount.	Per Cent.	1913.	1923.
	Million \$	Million \$	Million \$	p.c.	\$ c.	\$ c.
<i>Net Imports for Consumption.</i>						
Argentina.....	406.6	846.5 (i)	439.9	108.2	46.74	97.31
Australia.....	370.6	620.0 (i)	249.4	67.3	78.30	114.04
Belgium.....	894.7	665.2 (d)	229.5	25.6	118.07	87.80
Brazil.....	326.0	239.9 (d)	86.1	26.4	13.41	7.83
British India.....	594.1	713.8 (i)	119.7	20.1	1.88	2.24
Canada.....	659.1	839.4 (i)	230.3	34.9	87.65	97.25
Denmark.....	208.3	354.2 (i)	145.9	70.0	75.08	106.76
France.....	1,625.3	2,445.6 (i)	820.3	50.5	41.01	62.07
Germany.....	2,563.3	1,447.1 (d)	1,116.2	43.6	33.62	24.17
Italy.....	703.6	807.8 (i)	104.2	14.8	20.28	20.80
Japan.....	363.3	983.0 (i)	619.7	170.6	6.94	17.56
Netherlands.....	1,575.0	801.5 (d)	773.5	49.1	256.35	114.87
New Zealand.....	104.1	199.8 (i)	95.7	91.9	98.89	156.83
Spain.....	252.1	447.6 (i)	195.5	77.5	12.64	20.97
Sweden.....	226.9	363.7 (i)	136.8	60.3	40.44	61.09
Switzerland.....	370.5	413.0 (i)	42.5	11.5	97.99	106.41
Union of South Africa.....	196.5	256.3 (i)	59.8	30.4	28.72	36.99
United Kingdom.....	3,207.9	4,564.2 (i)	1,356.2	42.3	69.68	96.48
United States.....	1,756.9	3,789.4 (i)	2,032.5	115.6	18.10	31.69
<i>Exports (Domestic).</i>						
Argentina.....	465.6	827.1 (i)	361.5	77.6	53.61	95.07
Australia.....	354.0	501.8 (i)	147.8	41.7	74.78	92.29
Belgium.....	701.5	469.4 (d)	232.1	33.0	92.55	62.90
Brazil.....	314.7	348.5 (i)	33.8	10.7	12.94	11.37
British India.....	781.9	1,056.5 (i)	274.6	35.1	2.48	3.31
Canada.....	496.2	1,014.7 (i)	578.5	132.6	57.95	110.94
Denmark.....	170.8	287.2 (i)	116.4	68.1	61.55	86.53
France.....	1,327.9	1,891.5 (i)	563.6	42.4	33.53	48.01
Germany.....	2,402.9	1,446.8 (d)	956.1	39.8	36.22	24.17
Italy.....	484.7	518.6 (i)	33.9	7.0	13.97	13.36
Japan.....	313.5	716.2 (i)	402.7	128.4	5.99	12.79
Netherlands.....	1,239.4	519.8 (d)	719.6	58.1	201.71	74.51
New Zealand.....	102.1	207.9 (i)	105.8	103.6	97.01	163.17
Spain.....	204.1	233.4 (i)	29.3	14.4	10.23	10.93
Sweden.....	219.0	307.8 (i)	88.8	40.5	39.05	51.69
Switzerland.....	265.6	324.2 (i)	58.6	22.1	70.25	83.54
Union of South Africa.....	133.9	341.2 (i)	207.3	154.8	19.58	49.24
United Kingdom.....	2,556.2	3,575.7 (i)	1,019.5	39.9	55.52	75.58
United States.....	2,448.3	4,172.9 (i)	1,724.6	70.4	25.23	38.20

1.—Aggregate External Trade of Canada, 1868-1924.

Fiscal Years.	IMPORTS OF MERCHANDISE ENTERED FOR HOME CONSUMPTION.			EXPORTS OF MERCHANDISE.			Total of Imports for Home Consumption and Exports (Merchandise).
	Dutiable.	Free.	Total.	Canadian Produce. ¹	Foreign Produce.	Total.	
	\$	\$	\$	\$	\$	\$	\$
1868.....	43,655,696	23,434,463	67,090,159	48,504,899	4,196,821	52,701,720	119,791,879
1869.....	41,069,342	22,085,599	63,154,941	52,400,772	3,855,801	56,256,573	119,411,514
1870.....	45,127,422	21,774,652	66,902,074	59,043,590	6,527,622	65,571,212	132,473,286
1871.....	60,094,362	24,120,026	84,214,388	57,630,024	9,853,244	67,483,268	151,697,656
1872.....	68,276,157	36,679,210	104,955,367	65,831,083	12,798,182	78,629,265	183,584,632
1873.....	71,198,176	53,310,953	124,509,129	76,538,025	9,405,910	85,943,935	210,453,064
1874.....	76,232,530	46,948,357	123,180,887	76,741,997	10,614,096	87,356,093	210,536,980
1875.....	78,138,511	39,270,057	117,408,568	69,709,823	7,137,319	76,847,142	194,255,710
1876.....	60,238,297	32,274,810	92,513,107	72,491,437	7,234,961	79,726,398	172,239,505
1877.....	60,916,770	32,209,624	94,126,394	68,030,546	7,111,108	75,141,654	169,268,048
1878.....	59,773,039	30,622,812	90,395,851	67,989,800	11,164,878	79,154,678	169,550,529
1879.....	55,426,836	23,275,683	78,702,519	62,431,025	8,355,644	70,786,669	149,489,888
1880.....	54,182,967	15,717,575	69,900,542	72,899,697	13,240,006	86,139,703	156,040,245
1881.....	71,620,725	18,867,604	90,488,329	83,944,701	13,375,117	97,319,818	187,808,147
1882.....	85,757,433	25,387,751	111,145,184	94,137,657	7,628,453	101,766,110	212,911,294
1883.....	91,588,339	30,273,157	121,861,496	87,702,431	9,751,773	97,454,204	219,315,700
1884.....	80,010,498	25,962,480	105,972,978	79,833,098	9,389,106	89,222,204	195,195,182
1885.....	73,269,618	26,486,157	99,755,775	79,131,735	8,079,646	87,211,381	186,967,156
1886.....	70,658,819	25,333,318	95,992,137	77,756,704	7,438,079	85,194,783	181,186,920
1887.....	78,120,679	26,986,531	105,107,210	80,960,909	8,549,333	89,510,242	194,617,452
1888.....	69,645,824	31,025,804	100,671,628	81,382,072	8,803,394	90,185,466	190,857,094
1889.....	74,475,139	34,623,057	109,098,196	80,272,456	6,938,455	87,210,911	196,309,107
1890.....	77,106,286	34,576,287	111,682,573	85,257,586	9,051,781	94,309,367	205,991,940
1891.....	74,536,036	36,997,918	111,533,954	88,671,738	8,798,631	97,470,369	209,004,323
1892.....	69,160,737	45,999,676	115,160,413	99,032,466	13,121,791	112,154,257	227,314,670
1893.....	69,873,571	45,297,259	115,170,830	105,488,798	8,941,856	114,430,654	229,601,484
1894.....	62,779,182	46,291,729	109,070,911	103,851,764	11,833,805	115,685,569	224,756,480
1895.....	58,557,655	42,118,236	100,675,891	102,828,441	6,485,043	109,313,484	209,989,375
1896.....	67,239,759	38,121,402	105,361,161	109,707,805	6,606,738	116,314,543	221,675,704
1897.....	66,220,765	40,397,062	106,617,827	123,632,540	10,825,163	134,457,703	241,075,530
1898.....	74,625,088	51,682,074	126,307,162	144,548,662	14,980,883	159,529,545	285,836,707
1899.....	89,433,172	59,989,244	149,422,416	137,360,792	17,520,088	154,880,880	304,303,296
1900.....	104,346,795	68,304,881	172,651,676	168,972,301	14,265,254	183,237,555	355,889,231
1901.....	105,969,756	71,961,163	177,930,919	177,431,386	17,077,757	194,509,143	372,440,062
1902.....	118,657,496	78,080,308	196,737,804	196,019,763	13,951,101	209,970,864	406,708,668
1903.....	136,796,065	88,298,744	225,094,809	214,401,674	10,828,087	225,229,761	450,324,570
1904.....	148,909,576	94,999,839	243,909,415	198,414,439	12,641,239	211,055,678	454,965,093
1905.....	150,928,787	101,035,427	251,964,214	190,854,946	10,617,115	201,472,061	453,436,275
1906.....	173,046,109	110,694,171	283,740,280	235,483,956	11,173,846	246,657,802	530,398,082
1907.....	152,065,529	98,160,306	250,225,835	180,545,306	11,541,927	192,087,233	442,313,068
1908.....	218,160,047	134,380,832	352,540,879	246,960,968	16,407,984	263,368,952	615,909,831
1909.....	175,014,160	113,580,036	288,594,196	242,603,584	17,318,782	259,922,366	548,516,562
1910.....	227,264,346	143,053,853	370,318,199	279,247,551	19,516,442	298,763,993	669,082,192
1911.....	282,723,812	170,000,791	452,724,603	274,316,553	15,683,657	290,000,210	742,724,813
1912.....	335,304,060	187,100,615	522,404,675	290,223,857	17,492,294	307,716,151	830,120,826
1913.....	441,606,885	229,600,349	671,207,234	355,754,600	21,313,755	377,068,355	1,048,275,589
1914.....	410,258,744	208,935,254	619,193,998	431,588,439	23,848,785	455,437,224	1,074,631,222
1915.....	279,792,195	176,163,713	455,955,908	409,418,836	52,023,673	461,442,509	917,398,417
1916.....	289,366,527	218,834,607	508,201,134	741,610,638	37,689,432	779,300,070	1,287,501,204
1917.....	461,733,609	384,717,269	846,450,878	1,151,375,768	27,835,332	1,179,211,100	2,025,661,978
1918.....	542,341,522	421,191,056	963,532,578	1,540,027,788	46,142,004	1,586,169,792	2,549,702,370
1919.....	526,494,655	393,217,047	919,711,705	1,216,443,806	52,321,479	1,268,765,285	2,188,476,990
1920.....	693,655,165	370,872,958	1,064,528,123	1,239,492,098	47,166,611	1,286,658,709	2,351,186,832
1921.....	847,561,406	392,597,476	1,240,158,882	1,189,163,701	21,264,418	1,210,428,119	2,450,587,001
1922.....	495,626,323	252,178,009	747,804,332	740,240,680	13,686,329	753,927,009	1,501,731,341
1923.....	537,258,732	265,320,462	802,579,244	931,451,443	13,844,394	945,295,837	1,747,875,081
1924 ²	591,299,094	302,067,773	893,366,867	1,045,141,056	13,412,241	1,058,553,297	1,951,920,164

Including exports to the United States estimated "short" in the years 1868-1900. ² Nine months. The figures of imports and exports for the year 1924 are subject to revision.

AGGREGATE EXTERNAL TRADE OF CANADA 1901-1924



NOTE—Figures at the sides of the chart are in millions of dollars. Each vertical line represents one year from 1901 to 1924, and each horizontal line represents \$50,000,000 from zero to \$2,500,000,000.

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2.—Ratio of Exports to Imports and Value per capita of Exports, Imports and Total Trade, 1868-1924.

Fiscal Years.	Excess of Imports entered for Consumption over Total Exports.	Excess of Total Exports over Imports entered for Consumption.	Percentage Rate of Total Exports to Imports entered for Consumption.	Estimated Population.	VALUE PER CAPITA OF—		
					Exports Canadian Produce.	Imports.	Total Trade. ³
	\$	\$	p.c.		\$ cts.	\$ cts.	\$ cts.
1868.....	14,388,439	—	78.55	3,372,000	14.38	19.90	34.28
1869.....	6,898,368	—	89.07	3,413,000	15.35	18.50	33.85
1870.....	1,330,862	—	98.01	3,454,000	17.09	19.37	36.46
1871.....	16,731,120	—	80.13	3,518,000	16.38	23.94	40.32
1872.....	26,326,022	—	74.92	3,611,000	18.23	29.06	47.29
1873.....	38,565,194	—	69.03	3,668,000	20.87	33.94	54.81
1874.....	35,824,794	—	70.92	3,825,000	20.06	32.20	52.26
1875.....	40,561,426	—	65.45	3,887,000	17.93	30.21	48.14
1876.....	12,786,709	—	86.18	3,949,000	18.36	23.43	41.79
1877.....	18,984,740	—	79.83	4,013,000	16.97	23.45	40.42
1878.....	11,241,173	—	87.56	4,079,000	16.67	22.16	38.83
1879.....	7,915,850	—	89.94	4,146,000	15.06	18.98	34.04
1880.....	—	16,239,161	123.23	4,215,000	17.29	16.58	33.87
1881.....	—	6,831,489	107.05	4,337,000	19.36	20.86	40.22
1882.....	9,379,074	—	91.57	4,384,000	21.47	25.35	46.82
1883.....	24,407,292	—	79.97	4,433,000	19.78	27.49	47.27
1884.....	16,750,774	—	84.19	4,485,000	17.80	23.63	41.43
1885.....	12,544,394	—	87.42	4,539,000	17.43	21.98	39.41
1886.....	10,797,354	—	88.75	4,589,000	16.94	20.92	37.86
1887.....	15,596,968	—	85.16	4,638,000	17.46	22.66	40.12
1888.....	10,486,162	—	89.58	4,688,000	17.36	21.47	38.83
1889.....	21,187,285	—	79.93	4,740,000	16.94	23.02	39.96
1890.....	17,373,206	—	84.44	4,793,000	17.79	23.30	41.09
1891.....	14,063,585	—	87.39	4,844,000	18.31	23.02	41.33
1892.....	3,006,156	—	97.39	4,889,000	20.26	23.55	43.81
1893.....	740,176	—	99.36	4,936,000	21.37	23.33	44.70
1894.....	—	6,614,658	106.06	4,984,000	20.84	21.88	42.72
1895.....	—	8,637,593	108.58	5,034,000	20.43	20.00	40.43
1896.....	—	10,453,382	110.40	5,086,000	21.57	20.72	42.29
1897.....	—	27,839,876	126.11	5,142,000	24.04	20.73	44.77
1898.....	—	33,222,383	126.30	5,199,000	27.80	24.29	52.09
1899.....	—	5,458,464	103.65	5,259,000	26.12	28.41	54.53
1900.....	—	10,585,879	106.13	5,322,000	31.75	32.44	64.19
1901.....	—	16,578,224	109.32	5,403,000	32.84	33.13	65.97
1902.....	—	13,233,060	106.73	5,532,000	35.43	35.56	70.99
1903.....	—	134,952	100.06	5,673,000	37.79	39.68	77.47
1904.....	32,853,737	—	86.53	5,825,000	34.06	41.87	75.93
1905.....	50,492,153	—	79.96	5,992,000	31.85	42.05	73.90
1906.....	37,082,478	—	86.93	6,171,000	38.16	45.98	84.14
1907.....	58,138,602	—	76.77	6,302,000	28.65	39.70	68.35
1908.....	89,171,927	—	74.71	6,491,000	38.05	54.31	92.36
1909.....	28,671,830	—	90.06	6,695,000	36.24	43.10	79.34
1910.....	71,554,200	—	80.68	6,917,000	40.37	53.54	93.91
1911.....	162,724,393	—	64.06	7,206,643	38.06	62.82	100.88
1912.....	214,688,524	—	58.90	7,365,205	39.40	70.93	110.33
1913.....	294,138,879	—	56.18	7,527,208	47.26	89.17	136.43
1914.....	163,756,774	—	73.56	7,692,832	56.10	80.49	136.59
1915.....	—	5,486,601	101.20	7,862,078	52.07	57.99	110.06
1916.....	—	271,098,936	153.34	8,035,684	92.29	63.24	155.53
1917.....	—	332,760,222	139.31	8,180,160	140.75	108.48	249.23
1918.....	—	622,637,214	164.62	8,328,382	184.91	115.69	300.60
1919.....	—	349,053,580	137.95	8,478,546	143.47	108.48	251.95
1920.....	—	222,130,586	120.87	8,631,475	143.60	123.33	266.93
1921.....	29,730,763	—	97.60	8,788,483	135.31	141.11	276.42
1922.....	—	6,122,677	100.82	8,940,160	82.80	83.65	166.45
1923.....	—	142,716,593	117.78	9,082,840	102.63	88.42	191.05
1924 ²	—	165,186,430	118.49	9,226,740	113.40	96.85	210.25

¹ Nine months.² The figures for 1924 are subject to revision.³ Not including exports of foreign produce.

3.—Movement of Coin and Bullion, 1868-1918.

Fiscal Years.	Total Imports.	EXPORTS.			Total Imports and Exports of Coin and Bullion.
		Canadian.	Foreign.	Total.	
	\$	\$	\$	\$	\$
1868.....	4,895,147	4,866,168	—	4,866,168	9,761,315
1869.....	4,247,229	4,218,208	—	4,218,208	8,465,437
1870.....	4,335,529	8,002,278	—	8,002,278	12,337,807
1871.....	2,733,094	6,690,350	—	6,690,350	9,423,444
1872.....	2,753,749	4,010,398	—	4,010,398	6,764,147
1873.....	3,005,465	3,845,987	—	3,845,987	6,851,452
1874.....	4,223,282	1,995,835	—	1,995,835	6,219,117
1875.....	2,210,089	1,039,837	—	1,039,837	3,249,926
1876.....	2,220,111	1,240,037	—	1,240,037	3,460,148
1877.....	2,174,089	—	733,739	733,739	2,907,828
1878.....	803,726	—	168,989	168,989	972,715
1879.....	1,639,089	—	704,586	704,586	2,343,675
1880.....	1,881,807	—	1,771,755	1,771,755	3,653,562
1881.....	1,123,275	—	971,005	971,005	2,094,280
1882.....	1,503,743	—	371,093	371,093	1,874,836
1883.....	1,275,523	—	631,600	631,600	1,907,123
1884.....	2,207,666	—	2,184,292	2,184,292	4,391,958
1885.....	2,954,244	—	2,026,980	2,026,980	4,981,224
1886.....	3,610,557	—	56,531	56,531	3,667,088
1887.....	532,218	—	5,569	5,569	537,787
1888.....	2,175,472	—	17,534	17,534	2,193,006
1889.....	575,251	—	1,978,256	1,978,256	2,553,507
1890.....	1,083,011	—	2,439,782	2,439,782	3,522,793
1891.....	1,811,170	129,328	817,599	946,927	2,758,097
1892.....	1,818,530	306,447	1,502,671	1,809,118	3,627,648
1893.....	6,534,200	309,459	3,824,239	4,133,698	10,667,898
1894.....	4,023,072	310,006	1,529,374	1,839,380	5,862,452
1895.....	4,576,620	256,571	4,068,748	4,235,319	8,801,929
1896.....	5,226,319	207,532	4,401,777	4,699,309	9,925,628
1897.....	4,676,194	327,298	3,165,252	3,492,550	8,168,744
1898.....	4,390,844	1,045,723	3,577,415	4,623,138	9,013,982
1899.....	4,629,177	1,101,245	2,914,780	4,016,025	8,645,202
1900.....	8,152,640	1,670,068	6,987,100	8,657,168	16,809,808
1901.....	3,307,069	—	1,978,489	1,978,489	5,285,558
1902.....	6,053,791	—	1,669,422	1,669,422	7,723,213
1903.....	8,695,707	—	619,963	619,963	9,315,670
1904.....	7,554,917	—	2,465,557	2,465,557	10,020,474
1905.....	9,961,340	—	1,844,811	1,844,811	11,806,151
1906.....	6,670,527	—	9,928,828	9,928,828	16,599,355
1907 (9 mos.).....	7,029,047	—	13,189,964	13,189,964	20,219,011
1908.....	5,887,737	—	16,637,654	16,637,654	22,525,391
1909.....	9,611,761	2	1,589,791	1,589,793	11,201,554
1910.....	5,514,817	—	2,594,536	2,594,536	8,109,353
1911.....	9,226,715	—	7,196,155	7,196,155	16,422,870
1912.....	25,077,515	—	7,601,099	7,601,099	32,678,614
1913.....	4,309,811	—	16,163,702	16,163,702	20,473,513
1914.....	14,498,451	1,219	23,559,485	23,560,704	38,059,155
1915.....	131,483,396	667	29,365,701	29,366,368	160,849,764
1916.....	33,876,227	315	103,572,117	103,572,432	137,448,659
1917.....	26,986,548	86,087	196,460,961	196,547,048	223,533,596
1918.....	11,290,341	290,281	3,201,122	3,491,403	14,781,744

NOTE.—Information as to imports and exports of coin and bullion in the fiscal years 1919 to 1924 is not available for publication. Up to 1919 "silver bullion in bars, blocks, ingots, drops, sheets and plates, unmanufactured," was included in "coin and bullion," but since that time it is regarded as "merchandise." The figures from 1899 of the above table have been revised in accordance with the new arrangement.

4.—Duties collected on Exports, 1868-1892, and on Imports for Home Consumption, 1868-1924.

Fiscal Years.	Duties collected on Exports.	Duties collected on Imports.	Fiscal Years.	Duties collected on Exports.	Duties collected on Imports.
	\$	\$		\$	\$
1868.....	17,986	8,801,446	1881.....	8,141	18,492,645
1869.....	14,403	8,284,507	1882.....	8,810	21,700,028
1870.....	37,912	9,425,028	1883.....	9,756	23,162,553
1871.....	36,066	11,807,590	1884.....	8,515	20,156,448
1872.....	24,809	13,020,684	1885.....	12,305	19,121,254
1873.....	20,152	12,997,578	1886.....	20,726	19,427,398
1874.....	14,565	14,407,318	1887.....	31,397	22,438,309
1875.....	7,243	15,354,139	1888.....	21,772	22,187,869
1876.....	4,500	12,828,614	1889.....	42,207	23,742,317
1877.....	4,103	12,544,348	1890.....	93,674	23,021,234
1878.....	4,161	12,791,532	1891.....	64,803	23,416,266
1879.....	4,272	12,935,269	1892.....	108	20,550,474
1880.....	8,896	14,129,953			

Fiscal Years.	Duties collected on Imports.	Fiscal Years.	Duties collected on Imports.	Fiscal Years.	Duties collected on Imports.
	\$		\$		\$
1893.....	21,161,711	1904.....	40,954,349	1915.....	79,205,910 ¹
1894.....	19,379,822	1905.....	42,024,340	1916.....	103,940,101 ¹
1895.....	17,887,269	1906.....	46,671,101	1917.....	147,631,455 ¹
1896.....	20,219,037	1907 (9 months)...	40,290,172	1918.....	161,595,629 ¹
1897.....	19,891,997	1908.....	58,331,074	1919.....	158,046,334 ¹
1898.....	22,157,788	1909.....	48,059,792	1920.....	187,524,182 ¹
1899.....	25,734,229	1910.....	61,024,239	1921.....	179,667,683 ¹
1900.....	28,889,110	1911.....	73,312,368	1922.....	121,487,394 ¹
1901.....	29,106,980	1912.....	87,576,037	1923.....	133,803,370 ¹
1902.....	32,425,532	1913.....	115,063,688	1924 ²	135,134,894 ¹
1903.....	37,110,355	1914.....	107,180,578		

¹ Includes war tax.² Subject to revision.

NOTE.—Duties on exports were not collected after the year 1892.

5.—Exports to the United Kingdom, to the United States and to other Countries of Merchandise, the Produce of Canada, 1868-1924.

Fiscal Years.	Exports to United Kingdom.	Per cent Can. Exports to U.K. to total Can. Exports. (mdse.)	Exports to United States.	Per cent Can. Exports to U.S. to total Can. Exports. (mdse.)	Exports to Other Countries.	Total Exports of Canadian Produce.
	\$	p.c.	\$	p.c.	\$	£
1868.....	17,905,808	36.9	25,349,568	52.3	5,249,523	48,504,899
1869.....	20,486,389	39.1	26,717,656	51.0	5,196,727	52,400,772
1870.....	22,512,991	38.1	30,361,328	51.4	6,169,271	59,043,590
1871.....	21,733,556	37.7	29,164,358	50.6	6,732,110	57,630,024
1872.....	25,223,785	38.3	32,871,496	49.9	7,735,802	65,831,083
1873.....	31,402,234	41.0	36,714,144	48.0	8,421,647	76,538,025
1874.....	35,769,190	46.6	33,195,805	43.3	7,777,002	76,741,997
1875.....	34,199,134	49.1	27,902,748	40.0	7,607,941	69,709,823
1876.....	34,379,005	47.4	30,080,738	41.5	8,031,694	72,491,437
1877.....	35,491,671	52.2	24,326,332	35.8	8,212,543	68,030,546
1878.....	35,861,110	52.7	24,381,009	35.9	7,747,681	67,989,800
1879.....	29,393,424	47.1	25,491,356	40.8	7,546,245	62,431,025
1880.....	35,208,031	48.3	29,566,211	40.6	8,125,455	72,899,697
1881.....	42,637,219	50.8	34,038,431	40.5	7,269,051	83,944,701
1882.....	39,816,813	42.3	45,782,584	48.6	8,538,260	94,137,657
1883.....	39,538,067	45.1	39,513,225	45.1	8,651,139	87,702,431
1884.....	37,410,870	46.9	34,332,641	43.0	8,089,587	79,833,098
1885.....	36,479,051	46.1	35,566,810	44.9	7,085,874	79,131,735
1886.....	36,694,263	47.2	34,284,490	44.1	6,777,951	77,756,704
1887.....	38,714,331	47.8	35,269,922	43.6	6,976,656	80,960,909
1888.....	33,648,284	41.3	40,407,483	49.6	7,326,305	81,382,072
1889.....	33,504,281	41.7	39,519,940	49.2	7,248,235	80,272,456
1890.....	41,499,149	48.7	36,213,279	42.5	7,545,158	85,257,586
1891.....	43,243,784	48.8	37,743,430	42.6	7,684,524	88,671,738
1892.....	54,949,055	55.5	34,666,070	35.0	9,417,341	99,032,466
1893.....	58,409,606	55.4	37,296,110	35.4	9,783,052	105,488,798
1894.....	60,878,056	58.6	32,562,509	31.4	10,411,199	103,851,764
1895.....	57,903,564	56.3	35,603,863	34.6	9,321,014	102,828,441
1896.....	62,717,941	57.2	37,789,481	34.4	9,200,383	109,707,805
1897.....	69,533,852	56.2	43,664,187	35.3	10,434,501	123,632,540
1898.....	93,065,019	64.4	38,189,525	27.0	12,494,118	144,548,662
1899.....	85,113,681	62.0	39,326,485	29.0	12,920,626	137,360,792
1900.....	96,562,875	57.1	57,996,488	34.2	14,412,938	168,972,301
1901.....	92,857,525	52.3	67,983,673	38.3	16,590,188	177,431,386
1902.....	100,347,345	55.8	66,567,784	34.0	20,104,634	196,019,763
1903.....	125,199,980	58.4	67,766,367	31.6	21,435,327	214,401,674
1904.....	110,120,892	55.5	66,856,885	33.7	21,436,662	198,414,439
1905.....	97,114,867	50.9	70,426,765	36.9	23,313,314	190,854,946
1906.....	127,456,465	54.1	83,546,306	35.5	24,481,185	235,483,956
1907.....	98,691,186	54.7	62,180,439	34.4	19,673,681	180,545,306
1908.....	126,194,124	51.1	90,814,871	36.8	29,951,973	246,960,968
1909.....	126,384,724	52.1	85,334,806	35.2	30,884,054	242,603,584
1910.....	139,482,945	50.0	104,199,675	37.3	35,564,931	279,247,551
1911.....	132,156,924	48.2	104,115,823	38.0	38,043,806	274,316,553
1912.....	147,240,413	50.7	102,041,222	35.2	40,942,222	290,223,857
1913.....	170,161,903	47.8	139,725,953	39.3	45,866,744	355,754,600
1914.....	215,253,969	49.9	163,372,825	37.9	52,961,645	431,588,439
1915.....	186,668,554	45.6	173,320,216	42.3	49,430,066	409,418,836
1916.....	451,852,399	60.9	201,106,488	27.1	88,651,751	741,610,638
1917.....	742,147,537	64.5	280,616,330	24.4	128,611,901	1,151,375,768
1918.....	845,480,069	54.9	417,233,287	27.0	277,314,432	1,540,027,788
1919.....	540,750,977	44.5	454,873,170	37.4	220,819,659	1,216,443,806
1920.....	489,152,637	39.5	464,028,183	37.4	286,311,278	1,239,492,098
1921.....	312,844,871	26.3	542,322,967	45.6	333,995,863	1,189,163,701
1922.....	299,361,675	40.4	292,588,643	39.5	148,290,362	740,240,680
1923.....	379,067,445	40.7	369,080,218	39.6	183,303,780	931,451,443
1924 ²	360,094,021	34.5	430,715,496	41.2	254,331,539	1,045,141,056

¹Nine months.²Figures for 1924 are subject to revision.

6.—Imports from the United Kingdom, from the United States and from other Countries of Merchandise entered for Home Consumption, 1868-1924.

Fiscal Years.	Imports from United Kingdom.	Per cent Imports from U.K. to Total Imports. (mdse.)	Imports from United States.	Per cent Imports from U.S. to Total Imports. (mdse.)	Imports from Other Countries.	Total Imports for Home consumption.
	\$	p.c.	\$	p.c.	\$	\$
1868.....	37,617,325	56.1	22,660,132	33.8	6,812,702	67,090,159
1869.....	35,496,764	56.2	21,497,380	34.0	6,160,797	63,154,941
1870.....	37,537,095	56.1	21,697,237	32.4	7,667,742	66,902,074
1871.....	48,498,202	57.6	27,185,586	32.3	8,530,600	84,214,388
1872.....	62,209,254	59.7	33,741,995	32.1	9,004,118	104,955,367
1873.....	67,996,945	54.6	45,189,110	36.3	11,323,074	124,509,129
1874.....	61,424,407	49.9	51,706,906	42.0	10,049,574	123,180,887
1875.....	60,009,084	51.1	48,930,358	41.7	8,469,126	117,408,568
1876.....	40,479,253	43.8	44,099,880	47.7	7,933,974	92,513,107
1877.....	39,331,621	41.8	49,376,008	52.5	5,418,765	94,126,394
1878.....	37,252,769	41.2	48,002,875	53.1	5,140,207	90,395,851
1879.....	30,967,778	39.3	42,170,306	53.6	5,564,435	78,702,519
1880.....	33,764,439	48.3	28,193,783	40.3	7,942,320	69,900,542
1881.....	42,885,142	47.4	36,338,701	40.6	11,264,486	90,488,329
1882.....	50,356,268	45.3	47,052,935	42.3	13,735,981	111,145,184
1883.....	51,679,762	42.4	55,147,243	45.3	15,034,491	121,861,496
1884.....	41,925,121	39.6	49,785,888	47.0	14,261,969	105,972,978
1885.....	40,031,448	40.1	45,576,510	45.7	14,147,817	99,755,775
1886.....	39,033,006	40.7	42,813,651	44.6	14,140,480	95,982,137
1887.....	44,741,350	42.6	44,795,908	42.6	15,569,952	105,107,210
1888.....	39,167,644	38.9	46,440,296	46.1	15,063,688	100,671,628
1889.....	42,251,189	38.7	50,029,419	45.9	16,817,558	109,098,196
1890.....	43,277,009	38.8	51,365,661	46.0	17,039,903	111,682,573
1891.....	42,018,943	37.7	52,033,477	46.7	17,481,534	111,533,954
1892.....	41,063,711	35.7	51,742,132	44.9	22,354,570	115,160,413
1893.....	42,529,340	36.9	52,339,796	45.4	20,301,694	115,170,830
1894.....	37,035,963	34.0	50,746,091	46.5	21,288,857	109,070,911
1895.....	31,059,332	30.9	50,179,004	49.8	19,437,555	100,675,891
1896.....	32,824,505	31.2	53,529,390	50.8	19,007,266	105,361,161
1897.....	29,401,188	27.6	57,023,342	53.5	20,193,297	106,617,827
1898.....	32,043,461	25.4	74,824,923	59.2	19,438,778	126,307,162
1899.....	36,966,552	24.7	88,506,881	59.2	23,948,983	149,422,416
1900.....	44,280,041	25.7	102,224,917	59.2	26,146,718	172,651,676
1901.....	42,820,334	24.1	107,377,906	60.3	27,732,679	177,930,919
1902.....	49,022,726	25.0	115,001,533	58.4	32,713,545	196,737,804
1903.....	58,793,038	26.2	129,071,197	57.3	37,230,574	225,094,809
1904.....	61,724,893	25.3	143,329,697	58.7	38,854,825	243,909,415
1905.....	60,342,704	24.0	152,778,576	60.6	38,842,934	251,964,214
1906.....	69,183,915	24.4	169,256,452	59.6	45,299,913	283,740,280
1907 ¹	64,415,756	25.8	149,085,577	59.5	36,724,502	250,225,835
1908.....	94,417,320	26.8	205,309,803	58.2	52,813,756	352,540,879
1909.....	70,682,600	24.5	170,432,360	59.0	47,479,236	288,594,196
1910.....	95,337,058	25.8	218,004,556	58.9	56,976,585	370,318,199
1911.....	109,934,753	24.3	275,824,265	60.8	66,965,585	452,724,603
1912.....	116,906,360	22.4	331,384,657	63.4	74,113,658	522,404,675
1913.....	138,742,464	20.7	436,887,315	65.0	95,577,275	671,207,234
1914.....	132,070,406	21.4	396,302,138	64.0	90,821,454	619,193,998
1915.....	90,157,204	19.8	297,142,059	65.2	68,656,645	455,955,908
1916.....	77,404,361	15.2	370,880,549	73.0	59,916,224	508,201,134
1917.....	107,096,735	12.7	665,312,759	78.6	74,041,384	846,450,878
1918.....	81,324,283	8.4	792,894,957	82.3	89,313,338	963,532,578
1919.....	73,035,118	8.0	750,203,024	81.6	96,473,563	1,019,711,705
1920.....	126,362,631	11.9	801,097,318	75.3	137,068,174	1,064,528,123
1921.....	213,973,562	17.3	856,176,820	69.0	170,008,500	1,240,158,882
1922.....	117,135,343	15.7	515,958,196	69.0	114,710,793	747,804,332
1923.....	141,330,143	17.6	540,989,738	67.4	120,259,363	802,579,244
1924 ²	153,613,003	17.2	601,295,121	67.3	138,458,743	893,366,867

¹ Nine months. ² Figures for 1924 are subject to revision.

7.—Percentage Proportions of Imports from United Kingdom and United States, respectively, to totals of dutiable and free in the 24 fiscal years 1901-1924.

Fiscal Years.	UNITED KINGDOM.			UNITED STATES.		
	Dutiable to total dutiable.	Free to total free.	Dutiable and free to all imports.	Dutiable to total dutiable.	Free to total free.	Dutiable and free to all imports.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
1901.....	29.92	15.50	24.10	50.58	74.66	60.30
1902.....	29.54	17.94	24.95	50.72	70.11	58.40
1903.....	30.85	18.84	26.15	50.10	68.46	57.29
1904.....	30.18	17.73	25.34	52.07	69.14	58.71
1905.....	29.88	15.14	23.98	52.21	73.13	60.58
1906.....	30.40	15.03	24.42	51.74	71.90	59.59
1907 (9 months).....	32.05	16.04	25.79	51.93	71.28	59.60
1908.....	32.64	17.35	26.83	50.59	70.51	58.16
1909.....	29.84	16.31	24.52	51.76	70.20	59.00
1910.....	31.60	16.49	25.78	52.29	69.22	58.81
1911.....	29.82	15.05	24.34	54.14	72.05	60.84
1912.....	26.69	14.72	22.42	58.72	71.74	63.37
1913.....	24.47	13.43	20.71	62.57	69.78	65.03
1914.....	24.95	14.26	21.35	60.81	70.16	63.96
1915.....	24.31	12.61	19.79	60.27	72.85	65.13
1916.....	17.97	11.63	15.24	68.93	78.29	72.95
1917.....	16.35	8.24	12.67	71.91	86.59	78.57
1918.....	10.70	5.54	8.45	79.16	86.29	82.27
1919.....	9.50	5.90	7.97	79.10	84.74	81.50
1920.....	13.44	8.93	11.87	72.04	81.26	76.25
1921.....	20.07	11.17	17.25	64.19	79.51	69.04
1922.....	19.20	8.72	15.66	62.97	80.88	69.02
1923.....	21.61	9.49	17.61	61.85	78.66	67.41
1924.....	21.32	9.12	17.19	60.20	81.22	67.31

NOTE.—For the years 1868 to 1900, see Canada Year Book, 1916-17, pages 403-4.

8.—Average ad valorem Rates of Duty collected on Imports from United Kingdom, United States, and all Countries in the 57 fiscal years 1868-1924.

Years.	United Kingdom.		United States.		All Countries.		Years.	United Kingdom.		United States.		All Countries.	
	Average ad valorem rate of duty on							Average ad valorem rate of duty on					
	Duti- able Im- ports.	Total Im- ports.	Duti- able Im- ports.	Total Im- ports.	Duti- able Im- ports.	Total Im- ports.		Duti- able Im- ports.	Total Im- ports.	Duti- able Im- ports.	Total Im- ports.	Duti- able Im- ports.	Total Im- ports.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.		p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
1868.....	—	—	—	—	20.2	13.1	1897.....	30.7	21.1	26.7	14.3	30.0	18.7
1869.....	16.9	13.5	20.1	7.3	20.2	13.1	1898.....	29.5	20.8	26.1	13.3	29.7	17.5
1870.....	16.8	13.4	19.5	7.8	20.9	14.1	1899.....	26.6	19.8	26.3	13.2	28.8	17.2
1871.....	16.4	13.5	16.3	8.4	19.6	14.0	1900.....	25.6	18.2	25.0	13.2	27.7	16.7
1872.....	16.4	12.7	18.0	7.1	19.1	12.4	1901.....	24.7	18.3	24.8	12.4	27.5	16.4
1873.....	15.6	10.9	17.7	6.5	18.3	10.4	1902.....	24.0	17.2	25.2	13.2	27.3	16.5
1874.....	16.5	12.8	17.4	7.1	18.9	11.7	1903.....	23.3	16.7	24.9	13.3	27.1	16.5
1875.....	18.1	14.8	17.3	7.9	19.6	13.1	1904.....	24.1	17.6	25.2	13.6	27.5	16.8
1876.....	18.8	15.0	19.2	9.3	21.3	13.9	1905.....	24.8	18.5	26.1	13.5	27.8	16.7
1877.....	19.4	16.2	18.7	7.9	20.6	13.3	1906.....	24.6	18.7	24.8	13.1	27.0	16.4
1878.....	20.1	17.3	20.4	9.4	21.4	14.2	1907 (9 m.).....	24.3	18.4	24.2	12.8	26.5	16.1
1879.....	20.5	18.0	23.2	13.1	23.3	16.4	1908.....	24.2	18.3	24.6	13.2	26.7	16.5
1880.....	24.0	20.0	23.1	16.0	26.1	20.2	1909.....	25.8	19.0	24.9	13.2	27.5	16.7
1881.....	24.5	20.5	22.0	15.5	25.8	20.4	1910.....	25.1	18.9	24.8	13.5	26.8	16.5
1882.....	24.1	19.9	21.5	15.0	25.3	19.5	1911.....	24.6	18.9	24.7	13.7	25.9	16.2
1883.....	24.3	19.2	21.1	14.8	25.3	19.0	1912.....	25.0	19.1	25.0	14.8	26.1	16.8
1884.....	24.4	19.1	20.7	14.9	25.2	19.0	1913.....	25.1	19.6	24.9	15.8	26.1	17.1
1885.....	24.8	19.0	21.2	14.5	26.1	19.2	1914.....	25.2	19.5	24.8	15.6	26.1	17.3
1886.....	25.7	20.0	22.8	15.8	27.5	20.2	1915.....	27.1	20.5	25.1	14.2	27.4	16.8
1887.....	26.1	20.8	23.8	16.2	28.7	21.3	1916.....	28.4	19.1	25.0	13.5	27.2	15.5
1888.....	29.1	22.9	26.2	15.3	31.8	22.0	1917.....	24.9	17.6	22.7	11.4	23.8	13.0
1889.....	29.3	22.4	25.4	14.7	31.9	21.8	1918.....	24.3	17.3	20.5	11.1	21.5	12.1
1890.....	28.8	22.1	26.6	15.8	31.0	21.4	1919.....	22.3	15.3	20.9	11.6	21.5	12.3
1891.....	29.0	21.7	26.0	14.9	31.4	21.0	1920.....	22.1	16.2	22.5	14.0	22.5	14.7
1892.....	29.4	22.1	26.5	15.1	29.7	17.8	1921.....	20.9	16.6	20.3	12.9	20.6	14.1
1893.....	29.8	22.3	26.7	14.6	30.3	18.4	1922.....	24.8	20.1	23.0	13.9	24.5	16.2
1894.....	30.0	22.3	27.0	13.7	30.9	17.8	1923.....	24.5	20.1	22.5	13.8	24.9	16.7
1895.....	30.1	22.6	26.7	13.7	30.5	17.8	1924.....	22.3	18.3	22.3	13.2	22.9	15.1
1896.....	30.2	22.4	26.7	14.5	30.0	19.2							

9.—Imports for Home Consumption of certain Raw Materials used in Canadian Manufactures, 1902-1924.

Fiscal Years.	Iron Ore.	Crude Petroleum for refining. ¹	Rags, all kinds.	Broom corn. ²	Hides, horns, pelts, etc. ²	Sugar, raw.	Tobacco, raw.
	Ton.	Gal.	Cwt.	\$	\$	Ton.	Lb.
1902.....	—	—	367,373	202,487	5,086,052	159,348	11,329,674
1903.....	—	—	241,286	165,231	5,662,744	180,849	13,380,504
1904.....	—	—	254,484	197,982	4,916,222	183,405	14,248,303
1905.....	—	22,440,856	1,116,215	175,412	5,240,717	163,717	13,859,152
1906.....	—	19,805,656	1,697,801	196,804	6,811,267	210,215	14,519,658
1907 ³	—	13,252,968	156,102	167,654	5,843,511	142,334	14,347,476
1908.....	—	24,866,963	323,453	238,512	4,908,871	217,281	15,690,076
1909.....	—	31,594,212	256,617	246,701	5,218,108	226,712	15,994,878
1910.....	—	36,947,670	496,057	432,146	8,237,014	231,152	13,753,141
1911.....	—	54,310,597	536,604	389,173	8,105,330	271,532	17,204,271
1912.....	—	72,231,006	564,296	437,001	8,903,727	281,402	17,203,513
1913.....	2,116,933	143,338,070	750,003	377,462	13,486,459	310,101	22,153,588
1914.....	1,972,207	177,879,835	716,882	324,590	8,831,010	347,168	17,598,449
1915.....	1,055,724	196,203,287	540,922	285,574	12,842,558	335,820	18,595,957
1916.....	1,595,995	186,753,081	510,472	337,688	12,441,731	298,433	20,834,672
1917.....	2,318,547	135,533,089	780,062	449,137	12,863,893	365,772	17,702,637
1918.....	2,203,506	191,376,057	505,643	851,933	8,794,239	332,807	17,824,947
1919.....	2,227,919	260,819,944	570,211	1,119,700	5,426,008	359,470	25,103,080
1920.....	1,632,011	298,540,725	352,413	840,180	22,654,661	540,787	24,345,295
1921.....	1,950,291	311,719,057	316,315	511,222	10,652,787	347,594	20,007,411
1922.....	656,902	391,292,960	216,915	327,114	5,898,087	432,212	20,870,509
1923.....	1,044,999	397,603,716	329,894	685,819	7,947,410	571,728	14,548,694
1924 ⁴	1,807,223	418,775,453	347,535	764,180	7,297,750	419,710	15,941,339

Fiscal Years.	Noils and Worsted Tops.	Silk, raw, etc.	Manila grass and Sisal.	Cotton wool or raw cotton and waste.	Hemp, undressed.	Wool, raw.	Gutta percha, India-rubber, etc., crude.
	\$	Lb.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.
1902.....	204,995	106,637	6,223	693,578	160,794	103,607	29,104
1903.....	187,835	101,833	48,179	735,760	129,856	79,947	28,615
1904.....	206,914	98,356	98,267	557,765	123,885	73,394	32,134
1905.....	302,219	127,772	71,973	636,594	102,529	76,172	28,103
1906.....	291,127	120,207	96,244	675,495	123,857	63,118	24,916
1907 ³	331,199	79,059	141,250	662,548	75,037	39,228	20,021
1908.....	496,859	96,954	232,948	522,552	145,969	61,292	25,562
1909.....	470,664	106,364	311,138	653,160 ⁵	69,553 ⁶	56,839	20,391
1910.....	596,826	112,330	268,925	680,835 ⁵	58,911 ⁶	74,271	35,555
1911.....	778,320	121,748	272,638	812,622 ⁵	81,017 ⁶	64,224	28,035
1912.....	689,304	112,581	290,362	727,930 ⁵	82,661 ⁶	71,954	44,313
1913.....	980,432	75,776	343,644	774,578 ⁵	64,990 ⁶	92,092	56,655
1914.....	1,072,066	101,669	189,010	769,930 ⁵	55,572 ⁶	72,521	44,504
1915.....	1,312,885	94,458	283,660	730,325 ⁵	55,370 ⁶	131,940	65,045
1916.....	2,587,949	80,745	382,233	969,670 ⁵	50,914 ⁶	211,407	99,132
1917.....	2,988,177	138,765	323,441	877,634 ⁵	15,846 ⁶	145,812	107,580
1918.....	4,418,854	158,648	491,739	880,374 ⁵	45,177 ⁶	115,380	130,956
1919.....	5,314,793	213,441	314,150	1,117,235 ⁵	72,887 ⁶	158,767	192,272
1920.....	5,847,787	298,985	453,853	964,715 ⁵	46,553 ⁶	117,717	244,335
1921.....	5,533,108 ⁴	272,508	453,754	986,315 ⁵	47,090 ⁶	92,772	228,062
1922.....	7,225,381 ⁴	371,570	187,521	953,860 ⁵	77,833 ⁶	125,867	189,525
1923.....	9,110,310 ⁴	368,026	216,818	1,252,815 ⁵	203,844 ⁶	182,556	253,913
1924 ⁴	8,551,985 ⁴	335,495	268,722	955,966 ⁵	340,402 ⁶	193,759	288,772

¹ Prior to 1917 includes all petroleum. ² Value only; the trade returns do not give quantities.

³ Nine months. ⁴ Pounds. ⁵ Cotton waste included with rags, all kinds. ⁶ Includes dressed hemp.

⁷ Figures for 1924 are subject to revision.

10.—Exports to the United Kingdom, to the United States and to all Countries, by classes of Merchandise, the Produce of Canada,
by values and percentages, 1921-1924.

(According to new Classification.)

VALUES.

Classes.	1921.				1922.				1923.				1924. ¹			
	United Kingdom.	United States.	All Countries.		United Kingdom.	United States.	All Countries.		United Kingdom.	United States.	All Countries.		United Kingdom.	United States.	All Countries.	
	\$	\$	\$		\$	\$	\$		\$	\$	\$		\$	\$	\$	
Vegetable products (except chemicals, fibres and wood).....	141,169,556	146,539,833	482,140,444		196,199,365	47,587,209	317,578,963		268,828,862	41,891,873	407,760,092		244,840,466	51,335,858	430,932,150	
Animals and their products (except chemicals and fibres).....	91,291,301	75,751,046	188,359,937		70,368,963	48,391,355	135,788,720		64,628,261	55,225,166	135,841,642		64,421,808	55,800,064	140,423,284	
Fibres, textiles and textile products.....	2,643,202	7,122,882	18,783,884		1,020,612	1,996,634	4,585,987		1,077,976	4,432,767	7,850,843		1,596,930	3,948,445	8,055,083	
Wood, wood products and paper.....	36,761,384	216,011,556	284,561,478		15,664,295	148,065,672	179,925,887		19,824,368	191,363,061	228,756,205		20,598,494	230,177,833	273,354,778	
Iron and its products.....	17,653,826	19,630,413	76,500,741		4,758,888	4,693,020	28,312,272		11,566,627	9,409,263	51,137,912		9,872,536	9,091,971	66,975,571	
Non-ferrous metals and their products.....	9,873,516	30,029,799	45,939,377		5,997,576	14,687,260	27,885,906		8,107,032	27,889,699	44,358,037		10,246,235	43,457,040	65,911,171	
Non-metallic minerals and their products (except chemicals).....	3,127,338	22,270,447	40,121,892		3,253,427	12,605,032	22,616,684		728,674	20,817,688	27,646,704		1,218,676	17,748,619	26,776,330	
Chemicals and allied products.....	3,399,815	12,236,087	20,366,279		1,062,757	5,937,136	9,506,170		1,934,441	7,951,543	14,046,940		3,188,187	7,617,520	15,349,956	
Miscellaneous commodities.....	6,924,933	12,730,854	32,389,669		1,035,792	8,625,325	14,030,001		2,321,204	10,099,156	14,033,068		4,110,689	11,538,146	17,362,733	
Total.....	312,844,871	542,322,967	1,189,163,701		299,361,675	292,588,643	740,240,650		379,067,445	369,080,218	931,451,443		360,094,021	430,715,496	1,045,141,056	

PERCENTAGE OF EACH CLASS.

Classes.	1921.				1922.				1923.				1924. ¹			
	United Kingdom.	United States.	All Countries.		United Kingdom.	United States.	All Countries.		United Kingdom.	United States.	All Countries.		United Kingdom.	United States.	All Countries.	
	p.c.	p.c.	p.c.		p.c.	p.c.	p.c.		p.c.	p.c.	p.c.		p.c.	p.c.	p.c.	
Vegetable products (except chemicals, fibres and wood).....	45.12	27.02	40.54		65.54	16.26	42.90		70.92	11.35	43.78		67.99	11.92	41.23	
Animals and their products (except chemicals and fibres).....	29.18	13.97	15.84		23.51	16.54	18.35		17.05	14.96	14.58		17.89	12.96	13.44	
Fibres, textiles and textile products.....	0.85	1.31	1.58		0.34	0.68	0.62		0.29	1.20	0.84		0.44	0.92	0.77	
Wood, wood products and paper.....	11.75	39.83	23.93		5.23	50.61	24.31		5.23	51.55	24.56		5.72	53.44	26.15	
Iron and its products.....	5.64	3.62	6.43		1.59	1.60	3.82		3.05	2.55	5.49		2.74	2.11	6.41	
Non-ferrous metals and their products.....	3.16	5.54	3.86		2.00	5.02	3.77		2.14	7.56	4.76		2.85	10.10	6.31	
Non-metallic minerals and their products (except chemicals).....	1.00	4.11	3.37		1.09	4.31	3.06		0.19	5.64	2.97		0.34	4.12	2.56	
Chemicals and allied products.....	1.09	2.25	1.72		0.35	2.03	1.28		0.62	2.15	1.51		0.89	1.77	1.47	
Miscellaneous commodities.....	2.21	2.35	2.73		0.35	2.95	1.89		0.61	2.74	1.51		1.14	2.68	1.66	
Total.....	100.00	100.00	100.00		100.00	100.00	100.00		100.00	100.00	100.00		100.00	100.00	100.00	

¹Unrevised figures.

11.—Imports from the United Kingdom, from the United States, and from all Countries, by classes of Merchandise entered for Home Consumption, by values and percentages, 1921-1924.

(According to new Classification.)

VALUES.

Classes.	1921.			1922.			1923.			1924.		
	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Agricultural and vegetable products (except cereals, fibres and woods).....	38,724,082	119,614,933	259,431,110	27,950,425	84,803,204	172,665,523	26,666,163	73,035,162	161,669,784	28,612,584	81,379,916	186,468,685
Animal products (except chemicals and fibres).....	5,148,783	42,911,179	61,722,390	3,092,895	36,110,305	46,645,789	3,143,223	34,812,367	46,738,774	4,288,756	32,337,873	45,026,734
Fibres, textiles and textile products.....	111,348,051	101,738,045	243,608,342	50,892,567	67,619,469	139,997,137	69,339,824	77,283,472	170,146,958	72,298,562	74,769,236	173,795,660
Wood, wood products and paper.....	3,144,574	52,359,847	57,449,384	2,657,542	31,423,889	35,791,487	2,708,338	31,844,398	35,845,544	3,061,976	36,068,556	40,976,833
Iron and its products.....	16,095,085	228,855,725	245,625,703	8,985,903	99,938,235	110,210,539	12,671,433	124,370,193	138,724,455	18,241,866	152,176,749	173,473,503
Non-ferrous metals and their products.....	6,682,748	48,959,914	55,651,319	2,523,868	25,343,095	29,773,413	3,595,638	31,748,601	37,492,604	4,209,506	36,204,118	43,432,617
Non-metallic minerals and their products (except chemicals).....	9,118,403	188,459,045	206,095,113	6,324,790	118,216,653	137,604,140	12,508,655	114,711,860	139,989,012	10,451,716	135,702,171	155,899,393
Chemicals and allied products.....	6,046,972	28,128,104	37,887,449	3,237,117	18,143,315	24,630,333	3,638,013	18,414,962	25,793,101	4,203,326	18,419,577	26,088,041
Miscellaneous commodities.....	17,061,864	50,150,028	72,688,072	11,470,236	34,369,031	50,485,971	7,060,856	34,768,723	46,181,012	8,244,711	34,216,889	48,205,401
Total.....	213,973,562	856,176,820	1,240,158,882	117,135,343	515,958,196	747,804,332	141,330,143	540,989,738	892,579,244	153,613,003	601,295,121	893,366,867

PERCENTAGE OF EACH CLASS.

Classes.	1921.			1922.			1923.			1924.		
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Agricultural and vegetable products (except cereals, fibres and woods).....	18.10	13.97	20.92	23.86	16.44	23.09	18.87	13.50	20.14	18.63	13.54	20.87
Animal products (except chemicals and fibres).....	2.41	5.01	4.98	2.64	7.00	6.24	2.22	6.43	5.82	2.79	5.38	5.04
Fibres, textiles and textile products.....	52.04	11.88	19.64	43.45	13.11	18.72	49.06	14.29	21.20	47.07	12.43	19.46
Wood, wood products and paper.....	1.47	6.11	4.63	2.27	6.09	4.79	1.92	5.89	4.49	1.99	6.00	4.59
Iron and its products.....	7.80	26.50	19.81	7.67	19.37	14.74	8.97	22.99	17.28	11.88	25.31	19.42
Non-ferrous metals and their products.....	3.12	5.37	4.49	2.15	4.91	3.98	2.54	5.87	4.67	2.73	6.02	4.86
Non-metallic minerals and their products (except chemicals).....	4.26	22.01	16.62	5.40	22.91	18.40	8.86	21.20	17.44	6.80	22.57	17.45
Chemicals and allied products.....	2.82	3.29	3.05	2.77	3.51	3.29	2.57	3.40	3.21	2.74	3.06	2.92
Miscellaneous commodities.....	7.98	5.86	5.86	9.79	6.66	6.75	4.98	6.43	5.75	5.37	5.69	5.39
Total.....	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Unrevised figures.

12.—Exports of Canada to United Kingdom, United States and All Countries in quan-

No.	Principal articles by classes.	1921.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
I. Agricultural and Vegetable Products (except chemicals, fibres and wood).					
Beverages, alcoholic—					
Brewed—					
1	Ale, beer and porter..... gal.	102	51	793,172	3,000
	\$	86	125	912,964	4,080
Distilled—					
2	Gin..... gal.	—	265	972	—
	\$	—	1,392	3,459	—
3	Whiskey..... gal.	134,711	1,616	370,918	84,155
	\$	374,662	17,025	1,697,158	193,270
4	All other spirits, n.o.p..... gal.	14,843	220,464	529,124	—
	\$	19,267	374,565	587,277	—
Fermented—					
5	Wines..... gal.	386	4	2,441	—
	\$	812	51	6,774	—
	Total beverages, alcoholic..... \$	394,827	393,158	3,207,632	197,350
Fruits, fresh—					
6	Apples, green or ripe..... brl.	1,272,533	48,107	1,358,499	1,315,938
	\$	7,902,013	171,226	8,299,099	6,244,209
7	Berries, all kinds..... \$	—	376,661	377,230	—
8	All other fresh fruits, n.o.p..... \$	7,464	554,611	570,252	73,748
Dried and preserved—					
9	Apples dried..... lb.	1,112,885	125,756	2,066,999	1,109,360
	\$	188,774	15,245	315,372	116,907
10	Canned or preserved fruits..... \$	514,239	74,565	751,520	946,276
11	Fruits, dried, n.o.p..... lb.	—	24,178	31,629	—
	\$	—	5,810	7,405	—
12	Cider..... gal.	—	61,787	72,544	11,737
	\$	—	46,175	52,565	3,871
	Total fruits..... \$	8,610,167	1,246,616	10,373,443	7,385,011
Grains, flours and kindred products—					
Grains—					
13	Barley..... bush	7,940,979	304,878	8,563,553	9,481,888
	\$	10,561,195	472,033	11,469,050	7,582,764
14	Beans..... bush.	20	12,282	14,376	200
	\$	120	53,794	64,800	1,218
15	Buckwheat..... bush.	19,976	247,884	271,838	83,822
	\$	22,024	315,815	342,549	69,758
16	Corn, Indian..... bush.	2	8,616	17,560	2,280
	\$	10	16,692	34,615	2,105
17	Oats..... bush.	7,096,419	4,765,202	14,321,048	20,735,804
	\$	6,623,635	4,694,519	14,152,033	10,738,497
18	Peas, split..... bush.	613	2,402	56,263	—
	\$	2,415	9,395	241,092	—
19	Peas, whole..... bush.	31,775	47,696	113,262	15,976
	\$	181,786	263,812	606,342	68,448
20	Rice..... lb.	166,600	278,200	2,357,384	—
	\$	11,895	22,523	223,732	—
21	Rye..... bush.	1,108,789	717,086	3,201,430	1,110,809
	\$	2,331,294	1,344,976	6,231,170	1,096,888
22	Wheat..... bush.	29,294,612	42,324,894	129,215,157	92,498,351
	\$	73,489,796	91,442,298	310,952,138	119,976,127
	Total grains..... \$	93,224,170	98,635,857	344,317,521	139,535,805
Flour and milled products—					
23	Bran, shorts and middlings..... cwt.	4,670	719,948	819,781	4,701
	\$	6,170	1,236,851	1,481,097	3,937
21	Cornmeal..... brl.	242	840	24,588	395
	\$	2,000	7,722	187,003	2,244
23	Malt..... bush.	39,747	—	629,620	—
	\$	39,747	—	1,350,201	—
26	Oatmeal and rolled oats..... cwt.	357,241	3,544	397,266	571,347
	\$	2,096,098	19,709	2,343,965	2,214,820
27	Rice meal and rice flour..... lb.	1,083,730	60,250	1,360,068	1,064,640
	\$	68,328	1,219	84,298	22,572

titles and values by classes of home produce in the four fiscal years 1921-1924.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
312,550	472,735	44	1,349,202	1,509,763	-	2,852,877	3,192,491	1
687,467	849,285	54	2,696,400	2,866,351	-	4,902,077	5,335,668	
-	4	1	277	3,211	-	2,279	2,808	2
-	15	15	3,910	48,160	-	30,742	32,687	
20,228	193,773	44,598	28,568	407,718	170,133	244,576	1,229,947	3
235,183	925,895	68,800	476,963	2,983,524	799,839	3,776,211	9,462,428	
157	4,616	-	59	2,596	5,082	-	6,699	4
3,160	11,396	-	1,543	6,264	10,200	158	15,759	
87	2,100	212	31	870	215	938	1,949	5
177	3,658	443	92	2,027	452	5,521	7,633	
925,987	1,790,249	69,312	3,178,905	5,906,326	810,491	8,714,709	14,854,175	
486,445	1,845,955	1,325,658	71,744	1,460,656	1,537,996	54,042	1,653,206	6
2,381,419	8,854,379	5,842,200	325,385	6,452,044	6,739,347	244,879	7,271,683	
309,145	309,318	-	379,307	379,468	30	371,896	372,116	7
505,529	584,825	85,836	503,684	595,720	20,438	76,510	100,862	8
840,874	4,357,932	259,370	29,200	532,470	493,920	36,500	2,129,759	9
91,772	535,995	31,015	2,920	60,514	48,180	4,200	219,376	
322,708	1,295,725	648,526	159,267	850,385	786,130	36,591	861,313	10
14,880	20,435	-	5,975	30,032	575	100	7,940	11
797	1,587	-	1,737	5,835	86	32	920	
118,404	131,431	8,000	85,615	93,910	82,327	-	82,630	12
66,489	71,194	1,300	30,248	31,779	11,765	-	11,904	
3,677,859	11,653,023	6,608,877	1,402,548	8,375,745	7,605,976	734,108	8,838,174	
5,167	12,580,979	11,854,372	949,408	14,584,005	13,456,126	102,117	15,001,492	13
3,018	9,821,087	7,441,853	507,656	9,164,756	8,134,592	54,601	9,143,397	
4,390	11,634	5,437	74,877	80,813	170	29,930	30,679	14
14,257	32,302	15,535	233,408	250,428	850	90,208	93,093	
138,922	403,300	129,117	214,801	525,424	176,158	392,811	589,471	15
137,360	362,033	104,587	178,823	433,466	172,935	326,478	517,402	
17,247	25,278	6,138	4,933	26,777	1,191	15,494	19,745	16
20,240	30,074	4,933	7,318	27,757	1,072	15,066	20,268	
3,217,419	36,195,127	20,965,361	842,931	29,022,347	19,169,092	1,001,365	23,348,698	17
1,446,014	18,717,105	10,113,856	412,742	14,533,015	8,937,399	489,198	11,146,408	
20,885	84,258	-	3,163	55,484	-	600	52,652	18
69,941	265,281	-	9,958	174,402	-	2,016	140,238	
154,290	177,715	36,147	159,772	210,869	21,382	142,816	183,035	19
473,921	569,653	117,100	419,717	582,444	72,809	386,385	520,315	
885	172,825	-	-	5,751	1,120,077	2,200	1,382,634	20
66	6,761	-	-	258	50,853	39	56,803	
105,631	3,180,502	7,200,399	441,229	10,129,350	5,301,524	916	6,823,416	21
97,597	3,526,639	5,664,209	338,183	8,152,876	3,305,105	611	4,434,286	
16,592,797	136,489,238	166,846,960	16,213,629	215,074,566	173,221,251	21,228,507	256,870,237	22
23,335,277	179,990,730	192,002,549	18,828,694	252,145,805	177,742,273	20,379,924	267,758,559	
25,597,691	213,321,665	215,161,622	20,936,454	285,465,207	198,417,888	21,744,526	298,830,772	
854,829	954,616	7,394	1,725,023	1,924,522	3,620	2,304,520	2,383,652	23
939,910	1,103,899	7,160	1,917,732	2,194,326	6,458	2,954,561	3,069,065	
-	19,348	-	32	29,249	-	-	15,330	24
-	94,178	-	132	127,838	-	-	68,131	
30,549	124,583	-	-	128,106	-	-	243,151	25
63,625	237,510	-	-	176,564	-	-	284,174	
12,710	651,135	328,333	15,510	379,237	515,924	2,503	645,012	26
43,994	2,525,407	1,375,518	71,990	1,596,527	1,656,470	6,866	2,081,540	
240	1,064,880	323,000	-	323,000	1,007,420	-	1,007,420	27
34	22,606	7,690	-	7,690	16,340	-	16,340	

¹Unrevised figures.

12.—Exports of Canada to United Kingdom, United States and All Countries in quan-

No.	Principal articles by classes.	1921.			United Kingdom.
		United Kingdom.	United States.	All Countries.	
I. Agricultural and Vegetable Products. (except chemicals, fibres and wood)—con.					
Flour and milled products—concluded.					
1	Rye flour.....	brl. \$ -	450	10,833	357
		\$ -	5,179	104,613	2,091
2	Screenings.....	cwt. \$ 7,763	1,122,483	1,152,385	-
		\$ 10,847	651,370	702,144	-
3	Wheat flour.....	brl. \$ 2,746,780	1,187,750	6,017,032	4,737,020
		\$ 28,896,091	12,023,090	66,520,490	33,943,408
4	All other meal.....	brl. \$ -	345	855	4,889
		\$ -	3,439	6,805	22,320
	Total flour and milled products.....	\$ 31,119,281	13,948,579	72,780,616	36,211,412
Bakery products and prepared food—					
5	Biscuits and bread.....	cwt. \$ -	3,571	9,038	7
		\$ -	29,944	139,532	158
6	Cereal foods, prepared, all kinds.....	\$ 803,248	20,248	854,254	773,292
7	Macaroni, spaghetti and vermicelli.....	lb. \$ 2,292,980	268	2,545,359	2,476,796
		\$ 269,598	48	299,560	218,556
8	Cornstarch.....	lb. \$ 1,720	6,410	34,009	-
		\$ 220	434	3,137	-
9	Potato starch.....	lb. \$ -	-	570	-
		\$ -	-	63	-
	Total grains, flours and kindred products.....	\$ 125,416,517	112,635,110	418,394,683	176,739,223
Oils, vegetable, and by-products—					
10	Oilcake.....	cwt. \$ 89,799	13,850	195,247	59,180
		\$ 296,044	38,453	663,834	143,517
11	Oils, vegetable, n.o.p.....	gal. \$ 32	251,982	275,459	102
		\$ 125	146,261	197,482	235
	Total oils, vegetable, and by-products	\$ 296,169	184,714	861,316	143,752
Rubber and its products—					
12	Waste.....	cwt. \$ -	22,696	22,716	-
		\$ -	133,316	133,516	-
13	Belting.....	lb. \$ -	10,303	99,359	-
		\$ -	7,755	83,869	-
14	Boots and shoes.....	\$ 457,561	2,684	1,524,969	212,491
15	Clothing, including waterproofed.....	\$ 411	276	36,534	1,172
16	Hose.....	\$ 8,192	142,328	225,435	1,648
17	Tires for vehicles, pneumatic tire casings	\$ -	-	-	-
18	“ “ inner tubes.....	\$ -	-	-	-
19	“ “ solid rubber.....	\$ 252	9,550	62,475	-
20	Tires, pneumatic.....	\$ 3,641,468	169,583	8,191,511	1,098,428
21	All other mfs. of India rubber, n.o.p.....	\$ 100,399	199,748	581,219	14,332
	Total rubber and its products.....	\$ 4,208,283	665,240	10,839,528	1,328,171
Seeds for sowing—					
22	Clover.....	bush. \$ 43,420	123,524	179,255	20,365
		\$ 729,093	1,098,783	2,005,460	184,229
23	Flax.....	bush. \$ 51,304	9,224	60,528	16,392
		\$ 357,974	16,518	374,492	46,462
24	Grass.....	bush. \$ 1,388	81,130	93,690	1,200
		\$ 6,848	167,445	202,554	5,796
25	All other seeds, n.o.p.....	\$ 432	23,142	28,562	17,398
	Total seeds for sowing.....	\$ 1,088,347	1,305,888	2,611,068	253,885
Sugar, molasses, syrups and confectionery—					
26	Confectionery.....	\$ 419,623	57,524	1,190,718	45,736
27	Maple sugar.....	lb. \$ 18,924	7,979,970	7,999,233	28,511
		\$ 5,499	1,956,637	1,962,258	4,409
28	Maple syrup.....	gal. \$ 1,785	9,373	11,254	768
		\$ 5,295	26,162	31,767	2,054
29	Molasses.....	gal. \$ 205	883,685	887,667	3,381
		\$ 955	95,879	102,398	470
30	Sugar house syrup.....	gal. \$ -	-	-	-
		\$ -	-	-	-

titles and values by classes of home produce in the four fiscal years 1921-1924—con.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
—	1,502	285	1	286	1,355	—	1,355	1
—	9,955	1,628	6	1,634	6,481	—	6,481	2
385,714	385,714	3,550	1,696,026	1,700,716	—	2,126,062	2,126,062	3
53,661	53,661	2,773	337,474	340,894	—	529,762	529,762	4
570,567	7,414,282	4,723,527	612,564	10,227,060	4,234,084	221,641	11,714,929	5
3,824,832	53,478,150	27,174,526	3,883,424	60,075,426	22,188,665	1,335,795	62,783,118	6
244	6,335	9,553	198	9,834	—	180	10,429	7
2,092	31,740	38,527	1,860	41,671	37,916	1,042	41,629	8
4,928,148	57,557,097	28,607,822	6,212,618	64,562,570	23,912,330	4,828,026	68,880,240	9
1,582	5,291	—	1,078	4,811	6	1,246	6,206	10
16,596	84,346	—	11,001	69,196	123	12,188	85,265	11
15,997	816,575	466,842	14,641	519,593	733,821	5,941	773,833	12
463	2,695,016	276,306	26,450	395,784	63,410	3,780	174,989	13
63	240,642	20,985	2,763	32,343	4,291	269	14,182	14
—	13,205	—	—	9,890	—	—	350,730	15
—	1,148	—	—	904	—	—	24,325	16
—	30	—	—	—	—	500	1,300	17
—	6	—	—	—	—	30	94	18
30,558,495	272,021,479	244,563,271	27,177,477	350,640,813	223,068,453	26,590,980	363,608,711	19
15,640	413,916	84,181	16,115	447,202	46,815	98,110	413,195	20
32,189	1,010,152	200,500	40,058	1,084,954	91,227	186,986	835,546	21
375,840	397,923	—	123,504	178,095	20	106,834	383,994	22
73,992	91,192	—	53,765	87,902	29	49,677	140,254	23
106,181	1,101,344	200,500	93,823	1,172,856	91,256	236,663	975,800	24
17,192	17,192	—	34,343	34,343	236	15,378	15,614	25
62,623	62,623	—	90,126	90,126	1,182	65,731	66,913	26
615	106,746	3,900	5,530	363,657	18,002	315	465,091	27
455	56,197	1,372	1,583	177,304	9,144	225	269,243	28
8,217	709,299	305,773	1,086	1,367,327	362,365	4,566	1,939,589	29
5,776	19,253	178	39	9,442	—	150	17,242	30
122,255	143,589	403	85,519	117,836	6,050	62,197	139,073	31
—	—	1,112,386	7,445	4,431,002	1,364,595	5,799	5,701,903	32
—	—	91,440	448	403,881	136,236	1,472	641,244	33
2,730	89,833	2,500	1,477	121,053	9,167	12,779	162,500	34
70,020	2,721,819	—	—	—	—	—	—	35
158,937	259,196	13,465	51,341	214,930	43,268	23,065	273,531	36
431,013	4,061,809	1,527,520	239,064	6,932,901	1,932,007	175,784	9,211,238	37
229,110	258,401	73,058	197,648	304,908	59,779	330,780	437,781	38
1,546,933	1,809,281	547,807	1,230,107	2,017,239	386,480	2,168,254	2,847,837	39
1,266	17,678	1,319	6	1,325	—	1,299	1,290	40
4,191	50,699	5,276	30	5,306	—	4,800	4,800	41
83,479	86,339	577	56,736	62,247	824	61,165	67,479	42
316,420	326,369	3,142	115,792	127,092	1,919	131,327	141,485	43
20,950	43,337	18,014	10,815	44,859	16,699	9,555	34,475	44
1,888,494	2,229,686	574,239	1,356,744	2,194,496	405,098	2,313,936	3,028,597	45
29,124	440,174	40,774	3,679	433,492	40,319	628	494,725	46
2,052,774	2,092,715	40,745	2,695,561	2,738,227	15,551	2,763,697	2,784,070	47
158,799	164,389	8,049	366,106	374,457	3,612	540,528	545,415	48
2,739	3,659	536	5,018	5,885	1,390	4,829	6,502	49
6,794	9,152	1,151	10,093	11,954	2,709	10,830	14,137	50
1,277,046	1,290,425	—	801,166	801,968	64	611,221	615,932	51
60,104	66,007	—	21,292	21,889	126	47,431	50,785	52
—	—	—	—	—	—	2,218	2,218	53
—	—	—	—	—	—	644	644	54

¹Unrevised figures.

84111—30

12.—Exports of Canada to United Kingdom, United States and All Countries in quan-

No.	Principal articles by classes.	1921.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
I. Agricultural and Vegetable Products (except chemicals, fibres and wood) —concluded.					
1	Sugar, molasses, etc.—concluded.				
	Sugar, all kinds, n.o.p. lb.	1,124,142	56,889,790	65,706,539	113,178,263
	\$	247,161	9,999,566	11,837,930	9,050,710
2	Syrups, n.o.p. \$	5,481	—	11,454	19,257
	Total sugar, molasses, syrup and confectionery \$	684,014	12,135,768	15,136,525	9,122,636
Tea and coffee—					
3	Coffee and imitations of lb.	—	4,118	13,473	—
	\$	—	1,539	5,351	—
Tobacco—					
4	Tobacco, unmanufactured lb.	160,112	26,831	200,153	340,487
	\$	90,389	34,097	130,457	135,784
5	Cigars lb.	995	1	5,745	277
	\$	2,820	8	13,288	1,350
6	Cigarettes lb.	29,536	176	69,861	—
	\$	20,134	382	41,983	—
7	Stems and cuttings cwt.	70	5,559	5,653	88
	\$	2,638	3,640	7,400	1,325
8	All other tobacco lb.	3,464	5,597	13,514	147
	\$	3,173	9,485	17,716	176
	Total tobacco \$	119,154	47,612	210,844	138,635
Vegetables, fresh—					
9	Beets, sugar ton	—	11,502	11,502	—
	\$	—	103,175	103,175	—
10	Potatoes bush.	—	4,204,684	5,036,769	—
	\$	—	8,328,862	9,657,612	—
11	Turnips bush.	—	1,756,538	1,786,755	—
	\$	—	444,830	460,506	—
12	All other vegetables, fresh \$	363	105,284	152,123	383
Vegetables, prepared—					
13	Canned vegetables lb.	2,928,361	840,390	4,779,126	2,819,082
	\$	274,040	39,312	408,203	232,192
14	Dried vegetables lb.	—	209,541	219,005	1,500
	\$	—	56,964	59,747	396
	Total vegetables \$	274,403	9,078,427	10,841,366	232,971
Other vegetable products—					
15	Flaxseed, n.o.p. bush.	—	1,343,591	1,343,591	—
	\$	—	3,473,610	3,473,610	—
16	Fodders, other, n.o.p. \$	1,158	842,035	932,406	54,454
17	Groceries, all kinds, n.o.p. \$	1,894	2,558	113,020	48
18	Gum, chicle lb.	—	131,152	131,152	—
	\$	—	197,416	197,416	—
19	Hay ton	374	162,763	179,398	4,076
	\$	9,629	3,712,979	4,210,594	96,911
20	Hops lb.	19,265	26,976	75,308	769,283
	\$	18,492	20,226	55,433	377,123
21	Nuts lb.	17,880	15,538	35,272	22,840
	\$	4,330	4,298	9,123	5,717
22	Plants, shrubs and trees \$	412	88,971	97,074	497
23	Roots, herbs, bark, flowers, etc., for medicinal use, n.o.p. \$	1,892	67,532	71,532	1,833
24	Sea grasses and plants \$	—	39,724	47,632	—
25	Senega root lb.	26,687	236,834	268,363	10,564
	\$	26,178	252,863	283,830	7,469
26	Straw ton	—	6,909	7,042	140
	\$	—	69,979	72,181	2,285
27	Vinegar gal.	—	64,761	72,882	—
	\$	—	21,721	25,220	—
28	Other agricultural products \$	11,367	54,222	69,617	111,394
	Total Agricultural and Vegetable Products (except chemicals, fibres and wood) \$	141,169,556	146,539,883	482,140,444	196,199,365

titles and values by classes of home produce in the four fiscal years 1921-1924—con

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
373,775	140,883,112	202,955,300	600,525	292,441,281	83,379,200	29,900	115,720,595	1
34,963	10,922,436	13,641,327	39,198	19,755,985	8,744,604	3,344	11,913,063	2
-	19,299	11,516	-	11,539	-	-	274	
289,784	11,621,457	13,702,817	440,368	29,609,316	8,791,370	603,405	13,019,043	
1,135	10,884	-	3,312	19,427	600	4,849	31,330	3
374	3,456	-	1,058	5,751	159	1,685	9,844	
12,847	471,991	892,482	10,421	1,100,007	1,164,061	13,775	2,055,337	4
5,216	175,826	248,374	6,133	297,923	295,116	6,569	375,582	
7	539	90	-	987	900	72	2,833	5
24	2,399	486	-	3,220	3,112	270	9,832	
69	24,205	30	50	44,703	270	395	96,094	6
262	24,743	80	124	25,798	56	217	72,667	
4,985	7,410	8	4,753	5,358	159	829	4,043	7
4,526	37,975	133	3,998	12,902	2,988	2,258	17,121	
6,733	13,158	-	12,760	18,297	170	20,703	43,848	8
11,279	18,686	-	20,222	27,271	148	30,373	50,639	
21,307	259,629	249,073	30,477	367,114	301,420	39,687	525,841	
10,481	10,481	-	11,430	11,430	-	10,762	10,762	9
63,151	63,151	-	56,730	56,730	-	61,965	61,965	
1,822,004	3,755,529	-	771,638	2,798,842	240	563,975	3,030,328	10
1,204,620	2,936,676	-	456,588	1,887,075	195	536,762	2,856,742	
1,648,803	1,664,223	-	2,010,918	2,023,648	9,182	2,733,603	2,761,885	11
456,044	461,633	-	309,906	313,167	1,875	624,749	634,837	
212,472	242,454	100	88,143	119,933	424	109,987	159,480	12
1,539,644	4,745,397	5,422,178	3,659,093	11,033,167	10,629,278	4,327,717	16,606,115	13
58,379	321,635	538,304	165,686	841,401	867,916	204,681	1,193,450	
21,960	25,595	7,200	116,000	132,875	-	-	1,164	14
4,590	5,419	360	8,120	11,033	-	-	351	
1,999,256	4,030,968	538,764	1,085,173	3,229,339	870,410	1,538,144	4,906,825	
3,615,835	3,615,835	-	2,494,062	2,494,062	71,536	2,482,206	2,553,742	15
6,564,372	6,564,372	-	5,500,547	5,500,547	139,850	5,379,295	5,519,145	
357,313	424,530	43,175	409,381	554,726	65,651	941,829	1,055,072	16
2,688	125,838	-	1,358	98,071	-	1,269	44,429	17
11,122	11,122	-	-	-	-	-	-	18
3,396	3,396	-	-	-	-	-	-	
19,435	31,287	29,035	14,585	58,300	-	-	-	19
347,104	650,379	500,881	161,065	927,143	-	-	-	
-	780,515	621,299	130	636,719	897,643	-	898,857	20
-	379,668	216,653	20	217,807	352,663	-	353,006	
27,458	50,955	-	15,588	15,944	-	5,307	5,885	21
7,013	12,860	-	4,811	4,896	-	1,217	1,340	
83,666	87,025	862	211,621	215,944	476	420,326	424,231	22
39,249	44,156	10,376	74,048	87,232	16,006	70,070	88,706	23
21,831	33,389	180	28,553	47,931	-	44,948	63,043	24
156,683	181,894	18,984	363,210	415,018	54,718	236,373	383,505	25
108,097	124,748	12,655	244,543	281,032	33,168	139,320	229,275	
2,424	2,826	225	12,828	13,297	248	22,051	22,633	26
21,256	27,674	3,807	80,601	87,055	2,681	129,797	136,970	
64,322	66,957	-	176,197	178,056	-	59,617	61,802	27
20,406	21,848	-	49,718	50,616	-	24,685	25,643	
112,068	305,890	8,900	119,871	249,405	-	-	-	28
47,587,209	317,578,963	268,828,862	41,891,873	407,760,092	244,840,466	51,335,858	430,932,150	

¹Unrevised figures.

12.—Exports of Canada to United Kingdom, United States and All Countries in quan-

No.		Principal articles by classes.	1921.			
			United Kingdom.	United States.	All Countries.	United Kingdom.
II. Animals and Animal Products (except chemicals and fibres).						
Animals, living, for improvement of stock—						
1	\ Cattle.....	No.	—	1,270	1,342	—
		\$	—	616,337	635,662	—
2	\ Poultry.....	No.	28	12,013	12,332	79
		\$	450	63,091	64,897	895
3	\ Sheep.....	No.	—	1,027	1,085	—
		\$	—	64,055	66,025	—
4	\ Swine.....	No.	—	62	61	—
		\$	—	6,778	7,323	—
Other animals, living—						
5	\ Cattle, one year old or less, n.o.p.....	No.	—	72,731	72,822	—
		\$	—	1,473,222	1,474,521	—
6	\ Cattle, over one year old, n.o.p.....	No.	131	221,275	223,689	35,418
		\$	19,350	19,759,329	19,989,370	4,139,391
7	\ Horses.....	No.	50	2,925	3,626	—
		\$	11,100	651,129	780,977	—
8	Poultry, n.o.p.....	No.	—	706,806	707,303	—
		\$	—	780,510	781,280	—
9	Sheep, n.o.p.....	No.	—	183,634	185,382	1,178
		\$	—	1,700,992	1,717,734	13,230
10	\ Swine, n.o.p.....	No.	—	329	1,179	—
		\$	—	5,333	14,202	—
11	All other animals, living, n.o.p.....	\$	4,050	326,457	351,672	315
	Total animals, living.....	\$	34,950	25,447,233	25,883,663	4,153,831
12	Bones, horns, hoofs and their products.....	\$	—	319,668	320,505	—
Fishery products, n.o.p.—						
13	Codfish, haddock, pollock, hake and cusk, fresh.....	cwt.	—	46,261	46,270	234
		\$	—	203,119	203,245	1,110
14	Codfish, haddock, pollock, hake and cusk, dry salted.....	cwt.	1,678	96,217	553,918	761
		\$	15,122	957,074	6,049,377	4,259
15	Codfish, haddock, pollock, hake and cusk, wet salted and pickled.....	cwt.	—	145,931	146,312	—
		\$	—	830,508	834,187	—
16	Codfish, haddock, pollock, hake and cusk, smoked.....	cwt.	—	13,960	14,444	124
		\$	—	147,526	154,807	1,282
17	Codfish, boneless, canned, etc.....	cwt.	79	16,345	18,090	—
		\$	4,054	231,478	262,735	16
	Total codfish, haddock, pollock, hake and cusk.....	\$	19,176	2,363,705	7,594,351	6,667
18	Halibut, fresh.....	cwt.	—	55,636	55,695	941
		\$	—	912,046	913,085	16,690
19	Herring, fresh or frozen.....	cwt.	—	377,679	377,089	—
		\$	—	1,058,039	1,058,124	—
20	Herring, pickled.....	cwt.	—	40,015	124,873	—
		\$	—	177,055	496,232	—
21	Herring, canned.....	cwt.	—	1,545	20,588	6
		\$	—	18,710	274,354	79
22	Herring, smoked.....	cwt.	17	54,963	65,074	—
		\$	83	313,364	389,791	—
23	Herring, dry salted.....	cwt.	—	7,812	561,675	—
		\$	—	16,282	991,309	—
	Total herring.....	\$	83	1,583,450	3,209,810	79
24	Lobsters, fresh.....	cwt.	—	52,643	52,643	—
		\$	—	1,033,738	1,033,738	—
25	Lobster, canned.....	cwt.	23,446	31,462	66,585	33,249
		\$	2,006,994	2,230,393	5,179,569	1,797,467
	Total lobsters.....	\$	2,006,994	3,264,131	6,213,307	1,797,467
26	Mackerel, fresh.....	cwt.	—	48,141	48,141	—
		\$	—	573,712	573,712	—
27	Mackerel, pickled.....	cwt.	—	28,410	61,298	—
		\$	—	293,454	564,228	—
	Total mackerel.....	\$	—	867,166	1,137,940	—

titles and values by classes of home produce in the four fiscal years 1921-1924—con.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
664	667	—	498	542	—	671	781	1
267,980	272,085	—	117,422	128,072	—	144,625	188,720	2
8,254	8,444	50	6,270	6,581	23	8,772	9,110	3
56,687	58,033	792	48,661	50,877	290	37,330	39,102	4
1,011	1,023	—	629	629	—	744	883	5
34,217	34,417	—	24,262	24,262	—	32,414	42,794	6
66	75	—	438	448	—	124	217	7
3,910	4,251	—	16,256	17,171	—	5,200	8,475	8
51,257	51,334	—	29,125	29,198	—	25,175	25,322	9
413,188	413,855	—	257,529	258,031	—	264,431	265,471	10
121,060	161,483	25,758	193,272	229,237	59,486	68,332	164,063	11
3,299,633	7,852,111	2,809,796	5,609,998	8,742,373	6,287,815	3,683,836	10,398,367	12
2,129	2,251	—	1,477	1,863	—	1,945	2,447	13
517,518	535,428	—	220,893	278,178	1,175	317,361	391,382	14
839,753	840,450	—	596,427	597,200	—	588,131	598,719	15
797,481	798,401	—	541,339	542,241	—	495,479	496,719	16
97,119	100,350	—	73,691	75,154	—	27,579	29,343	17
535,612	562,452	—	463,988	473,798	—	195,218	207,696	18
2,449	3,109	—	1,184	1,857	—	324	1,494	19
60,059	67,548	—	21,896	28,038	—	4,460	14,600	20
484,286	486,906	4,782	771,128	777,925	2,658	1,231,638	1,233,051	21
6,470,511	11,085,487	2,815,370	8,093,372	11,321,966	6,291,938	6,411,992	13,291,377	22
82,582	84,357	560	126,977	134,431	—	98,029	106,125	23
41,302	41,566	—	12,739	13,268	70	12,136	12,336	24
154,001	155,557	—	53,169	56,729	353	46,550	47,771	25
148,335	780,063	437	132,533	679,869	823	130,840	619,592	26
1,002,734	6,113,206	3,381	974,629	5,283,636	6,748	926,632	4,326,619	27
154,900	156,949	—	138,262	140,716	—	60,900	60,912	28
658,004	669,875	—	562,507	575,018	—	292,797	292,822	29
13,850	14,348	9	13,499	13,967	8	14,872	15,875	30
139,750	146,541	90	121,667	127,451	87	141,055	151,677	31
13,889	14,022	—	14,585	14,731	54	17,061	17,186	32
160,034	162,028	—	151,953	153,556	974	181,521	183,256	33
2,114,523	7,247,207	3,471	1,861,925	6,196,390	8,162	1,588,555	5,002,145	34
65,165	66,339	—	56,354	56,559	—	33,382	33,336	35
835,166	854,992	—	751,482	753,667	—	517,821	530,171	36
213,267	213,312	—	274,733	274,818	—	264,100	264,499	37
396,607	396,860	—	483,372	483,779	—	723,817	726,327	38
51,475	108,182	—	35,855	89,894	—	27,357	72,441	39
212,152	398,689	—	116,201	263,908	—	100,735	201,824	40
457	11,740	76	563	16,757	362	218	14,990	41
3,880	93,339	404	4,566	144,590	2,075	11,528	160,390	42
26,219	47,085	62	52,955	66,851	—	36,915	48,123	43
109,153	201,064	443	192,177	254,056	—	172,106	224,229	44
40	643,574	8	17	642,229	—	13	1,090,574	45
453	1,000,427	47	127	1,031,601	—	99	1,935,049	46
722,245	2,090,379	894	796,443	2,177,934	2,075	1,008,235	3,217,729	47
72,926	72,926	—	42,252	42,252	—	50,525	50,525	48
1,403,257	1,403,257	—	1,041,713	1,041,713	—	1,320,652	1,320,652	49
15,691	72,440	33,358	20,205	76,227	30,773	22,093	65,593	50
736,521	3,756,443	2,143,779	1,215,854	4,807,714	2,002,168	1,490,367	4,467,629	51
2,139,778	5,159,700	2,143,779	2,257,567	5,849,427	2,002,168	2,811,019	5,788,281	52
58,915	58,915	16	104,868	104,884	—	60,750	60,750	53
560,074	560,074	96	858,143	858,239	—	433,300	433,300	54
29,051	44,066	—	44,906	70,385	—	17,945	54,847	55
268,061	383,617	—	397,483	529,819	—	134,826	297,908	56
828,135	943,691	96	1,253,623	1,333,053	—	568,126	731,208	57

¹ Unrevised figures.

12.—Exports of Canada to United Kingdom, United States and All Countries in quan-

No.	Principal articles by classes.	1921.			United Kingdom.
		United Kingdom.	United States.	All Countries.	
	II. Animals and Animal Products (except chemicals and fibres)—con.				
	Fishery products, n.o.p.—concluded.				
1	Oysters..... \$	—	5,961	6,369	36
2	Salmon, fresh and frozen..... cwt.	2,004	75,635	87,168	8,875
	\$	60,460	656,380	743,812	244,436
3	Salmon, smoked..... cwt.	40	87	135	—
	\$	640	1,517	2,344	—
4	Salmon, canned..... cwt.	168,657	12,285	308,578	159,004
	\$	5,584,566	237,018	7,580,977	3,473,776
5	Salmon, dry salted (chum)..... cwt.	—	226	56,873	—
	\$	—	2,295	131,160	—
6	Salmon, pickled..... cwt.	173	8,979	10,978	5
	\$	4,904	183,568	207,367	50
7	Salmon or lake trout, fresh..... cwt.	—	29,842	29,842	—
	\$	—	363,758	363,758	—
8	Sea fish, other, fresh..... cwt.	—	12,008	12,008	—
	\$	—	31,080	31,080	—
9	Sea fish, other, pickled..... cwt.	50	159	209	18
	\$	600	1,332	1,932	90
10	Sea fish, other, preserved..... cwt.	—	475	489	2
	\$	—	9,692	9,904	150
11	Smelts..... cwt.	—	59,921	59,921	—
	\$	—	774,359	774,359	—
12	Fish, bait..... \$	—	50,874	51,285	—
13	Fish, all other..... \$	—	3,330,229	3,330,229	1,457
14	Tullibee..... cwt.	—	63,293	63,293	—
	\$	—	324,858	324,858	—
	Total fish..... \$	7,679,335	15,286,047	33,134,093	5,540,898
15	Other fishery products..... \$	3,085	197,123	200,361	100
	Total fishery products, n.o.p..... \$	7,682,422	15,483,170	33,334,364	5,540,998
	Furs, hides, leather and their products—				
16	Furs, dressed..... \$	20,701	39,309	168,215	13,119
	Furs, undressed—				
17	Beaver skins..... No.	42,103	106,684	150,190	51,257
	\$	1,002,343	2,136,864	3,185,934	1,002,800
18	Fox skins, black and silver..... No.	546	3,600	4,471	860
	\$	143,334	648,548	888,104	172,704
19	Fox skins, other..... No.	8,937	20,106	30,621	15,492
	\$	341,539	431,183	845,290	475,862
20	Marten skins..... No.	14,361	28,403	42,987	19,658
	\$	446,181	838,824	1,296,110	551,844
21	Mink skins..... No.	25,406	71,673	97,125	43,133
	\$	281,976	759,814	1,042,341	506,478
22	Muskrat skins..... No.	390,748	860,442	1,253,553	629,420
	\$	737,715	1,630,874	2,379,855	943,702
23	Seal skins..... No.	875	2,351	3,613	2,458
	\$	20,962	10,914	33,736	52,098
24	Fur skins, n.o.p..... \$	535,63	1,472,23	2,059,691	548,081
25	Furs, manufactured..... \$	146,078	35,938	331,168	62,773
	Total furs..... \$	3,676,493	8,931,534	12,239,444	4,329,461
26	Hides and skins, n.o.p..... \$	17,874	4,708,612	4,732,207	47,686
	Leather, unmanufactured—				
27	Harness leather..... \$	3,655	416,559	435,076	25,031
28	Sole leather..... lb.	237,369	828,859	1,391,510	1,738,903
	\$	184,151	429,568	870,183	516,140
29	Upper leather..... \$	2,189,945	797,284	3,397,075	1,149,446
30	Other unmanufactured leather..... \$	63,178	337,678	436,094	7,530
	Leather, manufactured—				
31	Boots and shoes..... \$	904,078	276,015	1,441,338	82,764
32	Harness and saddlery..... \$	3,564	119,423	144,786	155
33	Other manufactures of leather..... \$	23,543	276,196	356,817	5,247
	Total leather..... \$	3,372,114	2,652,723	7,081,369	1,786,313
34	Hair..... \$	195	226,105	226,365	1,453
	Meats, fresh—				
35	Beef, fresh..... cwt.	88,838	358,383	519,994	57,973
	\$	1,262,349	5,829,181	8,331,298	662,313
36	Mutton and lamb, fresh..... cwt.	—	62,421	64,055	7,730
	\$	—	1,595,111	1,626,792	122,177
37	Pork, fresh..... cwt.	2,948	9,338	16,014	759
	\$	75,738	316,151	493,220	14,000
38	Poultry and game, dressed or undressed.. \$	12,763	523,128	585,859	127,575
	Meats cured, canned or otherwise prepared—				
39	Bacon and hams, shoulders and sides.... cwt.	974,228	5,997	982,338	986,623
	\$	31,201,380	203,960	31,492,407	22,873,449

titles and values by classes of home produce in the four fiscal years 1921-1924—con.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
3,799	4,396	—	1,189	1,504	134	4,016	4,741	1
96,830	106,702	7,150	89,142	96,773	13,130	83,602	98,207	2
735,064	993,373	149,018	778,158	934,172	224,593	817,964	1,060,146	3
115	647	—	2,049	2,111	—	4	368	3
1,951	7,306	5	47,710	48,588	5	77	9,489	4
5,449	436,239	62,284	5,920	321,969	152,631	7,093	540,635	4
18,457	6,433,252	1,358,405	178,965	4,489,509	3,430,153	145,871	7,721,075	5
5,082	84,234	—	143	133,348	—	5,716	132,075	5
8,768	221,588	—	1,132	376,776	—	18,400	424,382	6
9,521	14,570	10	16,857	22,276	—	12,326	19,117	6
181,278	231,355	294	347,007	399,460	—	205,649	284,872	7
31,141	31,141	—	31,071	31,071	—	34,344	34,344	7
346,569	346,569	—	304,194	304,194	—	337,974	337,974	8
4,156	4,193	—	31,860	32,108	168	27,288	27,876	8
29,575	29,953	—	32,871	34,557	702	55,748	58,340	9
375	470	—	136	193	—	344	402	9
1,649	2,105	—	643	1,438	—	2,641	3,042	10
108	112	238	267	1,252	—	137	714	10
1,856	2,030	11,100	4,073	22,311	—	1,633	3,483	11
82,655	82,655	—	56,446	56,446	—	84,168	84,170	11
1,064,388	1,064,388	—	803,009	803,009	—	1,209,079	1,209,103	12
65,405	65,405	—	41,000	41,000	—	51,421	51,421	12
3,336,308	3,523,044	4,792	3,429,920	3,561,120	—	—	—	13
33,979	33,979	—	24,868	24,868	—	26,145	26,145	14
118,844	118,844	—	119,354	119,354	—	132,685	132,685	14
12,572,061	20,339,887	3,671,854	13,014,288	27,592,468	5,700,077	13,191,914	30,448,775	15
34,133	41,070	3,348	42,743	55,249	188	83,336	98,600	15
12,606,194	29,380,957	3,675,202	13,057,031	27,557,717	5,700,265	13,278,220	30,547,375	16
13,955	41,013	24,548	48,194	86,053	30,902	7,748	76,861	16
144,686	195,943	59,104	154,304	213,806	52,468	151,818	205,278	17
2,680,015	3,682,815	1,100,798	3,045,632	4,152,173	815,733	2,605,517	3,436,048	17
4,948	5,902	1,557	3,264	5,051	3,850	2,318	7,287	18
865,763	1,053,933	202,567	332,476	557,834	424,453	219,327	787,662	19
26,907	42,728	14,493	49,184	64,598	49,828	86,544	137,184	19
476,193	959,402	447,623	864,165	1,327,782	1,620,432	1,600,975	3,237,676	20
34,102	53,825	14,056	26,226	40,420	16,943	33,134	50,165	20
878,060	1,431,071	307,886	587,433	898,454	376,041	751,117	1,128,960	21
127,561	171,340	47,362	137,980	187,355	64,474	157,234	226,385	21
1,270,564	1,785,764	455,374	1,094,782	1,574,532	634,047	1,515,345	2,198,383	22
1,705,787	2,347,389	934,226	2,362,006	3,348,397	979,037	2,036,139	3,113,756	22
2,403,952	3,365,286	1,600,387	3,527,784	5,198,682	1,261,185	2,816,639	4,215,481	23
1,798	4,256	723	2,741	3,464	4,042	1,199	5,241	23
4,400	56,498	10,571	13,883	24,454	55,458	3,393	58,851	24
1,882,044	2,460,568	618,780	1,824,359	2,472,314	885,329	2,218,657	3,130,707	24
51,301	141,489	17,225	36,482	92,466	32,374	23,644	134,094	25
10,526,247	14,978,199	4,785,759	11,375,199	16,384,744	6,135,954	11,762,362	18,494,723	26
3,936,788	4,027,427	62,173	7,226,747	7,399,951	59,858	5,326,279	5,654,153	26
330,513	360,248	1,146	662,290	668,072	410	515,257	525,033	27
3,715,634	5,614,385	542,831	3,148,187	4,061,657	1,782,888	3,912,046	6,229,227	28
1,126,450	1,710,518	176,098	1,014,446	1,343,830	499,957	1,453,411	2,165,559	29
1,125,604	2,344,024	772,792	1,692,469	2,581,129	588,554	2,094,201	2,825,374	29
304,831	350,410	4,251	124,092	131,360	16,329	100,409	117,615	30
162,859	272,346	16,740	65,453	130,034	29,072	121,352	304,913	31
21,194	34,359	116	21,231	27,475	145	53,110	61,121	32
84,010	99,880	24,286	111,432	150,686	14,699	334,008	365,374	33
3,165,461	5,171,785	995,429	3,691,413	5,032,586	1,149,166	4,671,748	6,361,959	34
135,522	136,975	2,127	249,645	255,241	1,479	277,169	279,229	34
216,478	283,566	79,878	182,640	290,285	40,014	137,571	203,594	35
2,550,093	3,324,037	530,301	2,156,747	2,932,573	273,603	1,780,528	2,307,903	36
69,988	78,970	—	35,022	36,101	295	15,547	17,161	36
1,198,783	1,342,146	—	827,426	847,233	5,890	374,778	403,860	37
7,146	10,493	1,034	5,486	7,586	453	8,111	12,410	37
175,478	229,442	17,576	145,021	179,731	7,681	220,994	277,877	38
750,490	916,347	122,254	629,183	815,317	113,606	208,112	367,067	38
1,404	992,080	1,008,183	1,680	1,015,901	985,601	3,529	996,245	39
47,991	23,012,480	29,364,762	44,257	22,536,397	17,876,255	89,103	18,113,755	39

¹Unrevised figures.

12.—Exports of Canada to United Kingdom, United States and All Countries in quan-

No.	Principal articles by classes.	1921.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
II. Animals and Animal Products (except chemicals and fibres)—concluded					
	Meats cured, canned or otherwise prepared—con.				
1	Beef, pickled, in barrels..... cwt.	—	1,994	15,072	37
	\$	—	29,764	173,291	512
2	Canned meats, n.o.p..... lb.	283,732	85,739	437,239	690,004
	\$	168,101	35,287	220,437	207,583
3	Extracts of fluid beef..... lb.	10,642	6,891	20,987	—
	\$	7,732	4,070	13,873	—
4	Pork, dry salted..... cwt.	1,096	394	9,125	2,087
	\$	33,676	6,599	198,502	33,534
5	Pork, pickled, in barrels..... cwt.	44	806	6,118	—
	\$	1,160	15,246	110,750	—
6	All other meats, n.o.p..... lb.	3,107,218	2,568,483	11,060,647	3,136,585
	\$	399,165	439,605	1,255,091	304,239
	Total meats..... \$	33,162,064	8,998,102	44,501,520	24,345,322
	Milk and its products—				
7	Cream, fresh..... gal.	—	1,279,195	1,279,195	—
	\$	—	1,987,461	1,987,461	—
8	Milk, fresh..... gal.	—	1,508,618	1,508,618	—
	\$	—	412,916	412,916	—
9	Butter..... lb.	2,098,716	5,993,786	9,739,414	3,713,709
	\$	1,016,935	3,156,951	5,128,831	1,444,657
10	Cheese..... lb.	122,652,290	641,950	133,620,340	125,942,940
	\$	34,024,595	184,883	37,146,722	24,007,726
11	Milk, condensed, canned, preserved, etc. lb.	21,904,938	14,919,288	49,147,451	16,180,302
	\$	3,644,723	2,352,319	8,187,937	2,276,575
	Total milk and its products..... \$	33,686,253	8,094,530	52,863,867	27,728,958
	Oils, fats, greases and waxes—				
12	Animal oils, neat's foot, etc..... gal.	13,262	50	16,440	8,112
	\$	39,667	1,071	45,947	14,987
13	Cod liver oil..... gal.	—	90,231	98,303	211
	\$	—	82,073	87,427	105
14	Seal oil..... gal.	—	2,298	2,298	—
	\$	—	2,349	2,349	—
15	Whale oil..... gal.	—	78,542	78,542	—
	\$	—	95,454	95,454	—
16	Other fish oil..... gal.	—	96,462	96,462	—
	\$	—	65,789	65,789	—
	Other fats, greases and waxes—				
17	Grease and grease scraps..... cwt.	113	21,170	21,672	1,246
	\$	2,149	104,579	108,917	7,830
18	Lard..... cwt.	12,612	1	30,961	32,530
	\$	202,990	15	617,334	471,266
19	Lard compounds and substitutes..... cwt.	86	22	2,334	—
	\$	2,424	511	57,095	—
20	Tallow..... cwt.	—	18,512	18,964	44
	\$	—	165,396	172,146	351
21	Wax..... lb.	24,356	76,471	102,173	10,288
	\$	6,594	37,270	44,267	2,160
	Total oils, fats, greases and waxes \$	253,824	554,507	1,296,725	496,699
	Other animal products—				
22	Eggs..... doz.	6,266,169	191,258	6,579,853	3,917,870
	\$	4,229,608	118,513	4,425,856	1,839,880
23	Glue and glue stock..... \$	2,770	141,728	145,599	1,086
24	Honey..... lb.	60	36,164	36,929	1,245
	\$	20	8,996	9,195	162
25	Sausage casings..... \$	138,682	296,069	579,674	93,755
26	Tails..... \$	—	18,329	18,329	—
27	Tankage..... cwt.	—	232,641	232,681	—
	\$	—	554,506	554,706	—
28	Other animal products, n.o.p..... \$	33,311	120,755	159,549	3,359
	Total Animals and Animal Products (except chemicals and fibres)..... \$	91,291,301	75,751,046	188,359,957	70,368,963

titles and values by classes of home produce in the four fiscal years 1921-1924—con.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
4	483	—	247	1,173	—	878	2,180	1
46	5,676	—	4,175	9,172	—	8,487	19,281	2
3,446	708,321	163,276	—	179,632	93,268	539	130,983	3
1,288	213,397	52,969	—	56,151	31,027	191	39,540	4
2,273	2,561	—	2,650	3,144	—	4,268	4,736	5
3,510	3,606	—	5,694	5,872	—	8,273	9,005	6
600	12,345	13,743	—	13,751	21,023	—	22,361	7
5,965	155,587	222,938	—	223,056	280,086	—	315,798	8
331	6,410	—	19	5,368	—	—	3,300	9
1,908	68,679	—	333	48,985	—	—	4,123	10
1,180,551	5,836,288	3,231,479	1,425,713	7,194,298	2,782,087	1,252,756	8,177,157	11
163,930	555,150	222,421	224,177	590,267	167,717	227,065	611,151	12
4,899,482	29,826,547	23,533,221	4,037,013	23,244,664	18,764,865	2,917,531	22,594,357	
1,671,678	1,671,678	—	1,712,241	1,712,241	—	2,783,866	2,783,866	13
2,479,080	2,479,080	—	2,793,937	2,793,937	—	4,632,030	4,632,030	14
1,391,299	1,391,299	—	856,039	856,039	—	2,191,395	2,191,395	15
311,922	311,922	—	189,301	189,301	—	443,546	443,546	16
3,032,939	8,430,591	17,527,607	2,423,086	21,994,578	4,371,197	6,394,927	13,648,968	17
1,080,357	3,224,390	6,429,378	979,885	8,243,138	1,522,145	2,418,375	5,070,691	18
2,969,750	133,849,760	106,550,400	5,902,300	114,548,900	1,103,816	33,479	1,167,707	19
464,189	25,440,322	19,428,127	984,084	20,828,234	22,153,209	589,098	23,426,282	20
4,894,690	34,042,679	11,179,488	7,334,155	30,334,991	13,158,445	10,861,394	48,955,003	21
844,888	5,085,110	1,006,168	895,305	3,244,913	1,269,808	1,491,058	5,577,265	22
5,141,849	36,542,237	26,863,673	5,843,796	35,300,804	24,945,162	9,577,155	39,152,862	
6,255	136,132	1,267	1,231	62,193	6,118	—	96,173	23
2,992	146,355	4,593	385	69,680	8,346	—	110,988	24
199,213	203,823	—	217,362	221,640	—	102,076	106,327	25
77,950	79,942	—	101,228	102,859	—	54,858	56,912	26
8,609	18,393	—	9,414	9,494	—	8,389	8,389	27
4,808	12,116	—	4,117	4,137	—	5,058	5,058	28
65,357	65,357	145,096	108,290	253,386	154,246	318,958	473,204	29
27,108	27,108	71,669	31,771	103,440	45,412	170,099	215,511	30
101,235	101,825	—	74,337	74,359	—	127,475	130,730	31
21,372	21,771	—	24,315	24,328	—	40,814	42,062	32
38,349	40,760	301	23,148	26,836	984	7,957	14,157	33
152,954	169,126	2,104	93,909	123,898	8,441	18,889	70,065	34
19	47,959	30,667	134	42,633	17,542	12	53,342	35
241	686,394	442,988	1,641	595,115	245,450	214	745,705	36
—	11,850	1,746	—	29,071	—	—	29,454	37
—	156,373	21,300	—	376,070	8	4	392,309	38
15,653	16,426	—	14,092	14,639	792	10,597	12,405	39
77,525	82,806	—	108,016	111,915	4,954	76,153	89,127	40
34,320	45,643	—	16,276	16,523	2,993	3,684	7,083	41
7,766	10,276	—	3,682	3,736	210	982	1,304	42
372,716	1,392,267	542,634	369,064	1,515,178	312,821	367,071	1,729,041	
311,271	4,399,534	3,158,070	290,489	3,613,531	2,543,510	141,379	2,890,509	43
126,851	2,039,352	1,251,010	98,181	1,410,444	902,576	49,458	1,027,141	44
123,536	125,100	126	59,990	61,225	280	17,073	17,723	45
70,590	74,107	7,130	54,819	116,353	295,641	55,873	513,038	46
12,268	12,840	1,091	8,554	13,520	34,473	7,872	54,561	47
305,595	536,803	94,393	322,593	531,651	113,792	372,922	607,970	48
9,413	9,413	—	22,398	22,488	—	16,411	16,411	49
256,877	260,377	—	291,764	291,986	—	299,707	300,625	50
308,060	314,396	—	491,894	492,655	—	472,494	475,427	51
128,220	134,578	5,473	151,308	163,377	9,179	176,278	189,769	52
48,391,355	135,798,729	64,628,261	55,225,166	135,841,642	64,421,808	55,800,064	149,423,284	

¹ Unrevised figures.

12.—Exports of Canada to United Kingdom, United States and All Countries in quan-

No.	Principal articles by classes.	1921.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
III. Fibres, Textiles and Textile Products.					
1	Cotton and its products—				
	Cotton waste..... cwt.	—	887	1,014	—
			17,302	18,890	
2	Cotton clothing..... \$	343,799	29,697	1,728,166	99,498
3	Cotton fabrics and cotton duck..... yd.	209,276	20,029	1,734,619	46,870
		274,093	22,210	783,072	24,735
4	Manufactures of cotton, n.o.p..... \$	71,626	112,606	313,289	30,739
	Total cotton and its products..... \$	689,518	181,815	2,843,417	154,972
5	Flax, hemp, jute and their products—				
6	Flax fibre and flax tow..... \$	580,863	404,059	1,298,329	100,643
	Other articles..... \$	6,841	25,045	57,692	4,503
	Total flax, hemp, etc..... \$	587,704	429,104	1,356,021	105,146
7	Silk and its products..... \$	158,710	23,543	343,077	128,707
8	Wool and its products—				
	Wool..... lb.	130,619	7,128,065	7,288,373	16,033
		54,856	2,094,691	2,168,256	2,396
9	Clothing, wool, knitted..... \$	82,819	119,273	564,425	23,576
10	Wool fabrics..... \$	86,746	154,830	1,212,246	4,474
11	Woolens, n.o.p..... \$	59,198	389,258	3,905,576	12,081
	Total wool and its products..... \$	283,619	2,758,052	7,859,593	42,527
2	Vegetable fibres and their products—				
	Binder twine..... cwt.	17,831	165,184	186,124	14,767
		227,939	2,924,198	3,192,174	194,178
13	Mixed textile products—				
	Rags..... \$	276,406	669,859	951,135	85,957
14	Cordage, ropes and twine..... \$	9,858	26,022	185,924	11,135
15	Felt, manufactures of..... \$	8,142	19,743	101,401	6,830
16	Oilcloths, all kinds..... sq. yd.	—	59	83,942	—
			28	47,169	—
17	Sails, awnings, tents and tarpaulins..... \$	1,380	5,169	11,711	—
Wearing apparel, n.o.p.—					
18	Braces or suspenders..... \$	199,308	91	287,071	32,223
19	Corsets and parts of..... \$	182,051	22,991	1,250,567	233,598
20	Gloves and mitts..... \$	2,014	513	26,833	252
21	Hats and caps..... \$	2,353	7,774	130,438	6,983
22	Clothing and wearing apparel, n.o.p..... \$	1,445	550	27,144	—
23	Other articles..... \$	12,755	53,430	179,299	18,099
	Total Fibres, Textiles and Textile Products..... \$	2,643,202	7,122,882	18,783,884	1,020,612
IV. Wood, Wood Products and Paper.					
24	Books and printed matter..... \$	187,603	557,317	941,209	93,672
Paper—					
25	Bags, boxes and cartons..... \$	4,288	7,646	123,952	7,042
26	Bond and writing paper..... cwt.	5,913	10	60,558	—
		72,261	134	989,068	—
27	Book paper..... cwt.	6,860	1,438	65,194	280
		81,011	11,514	779,763	4,681
28	Hangings or wall paper..... roll	509,160	70,861	5,108,287	314,106
		134,323	17,978	831,772	68,055
29	Newsprint paper..... cwt.	88,849	13,376,836	15,112,586	54,028
		444,130	68,792,519	78,922,137	222,355
30	Paper board..... \$	2,065,845	2,423,495	5,267,842	694,642
31	Roofing paper, all kinds..... \$	12,860	106,740	354,690	29,759
32	Wrapping paper..... cwt.	90,365	18,929	340,946	46,572
		966,616	165,291	3,672,780	388,504
33	Other paper and mfrs. of..... \$	64,094	645,712	1,161,303	9,888
	Total paper..... \$	3,845,428	72,170,129	92,103,307	1,424,926

titles and values by classes of home produce in the four fiscal years 1921-1924—con.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
1,065	1,195	134	5,935	6,156	62	9,072	12,968	1
8,884	10,250	3,076	69,395	73,112	1,442	107,241	124,832	2
1,486	217,902	85,235	1,493	366,202	92,201	1,794	329,040	3
77,341	583,976	78,829	62,797	900,806	18,047	26,385	528,426	4
126,000	289,245	28,165	35,759	339,315	13,400	10,458	299,450	
230,032	382,872	18,222	63,048	115,021	24,553	23,139	85,729	
367,002	900,269	134,698	169,635	893,710	131,596	142,632	839,031	
62,702	167,865	62,539	260,020	331,488	64,955	120,537	185,522	5
7,372	14,174	8,472	2,316	17,176	5,372	14,867	28,140	6
70,074	182,039	71,011	262,336	348,664	70,327	135,404	213,662	
13,308	209,715	135,823	35,750	391,015	264,484	7,169	655,556	7
1,011,270	1,034,433	32,747	8,614,609	8,667,400	706,028	5,261,899	6,009,079	8
235,563	242,045	16,448	2,341,330	2,363,931	259,593	1,674,005	1,947,234	9
43,886	186,515	2,326	20,480	171,630	5,265	12,525	209,551	10
98,774	139,994	1,082	41,058	58,685	60	18,651	32,576	11
525,469	601,107	2,629	137,638	161,185	11,144	97,203	165,406	
903,692	1,169,661	22,485	2,510,506	2,755,434	276,062	1,802,384	2,354,767	
6,811	33,693	8,371	48,062	75,199	10,646	93,926	139,193	12
107,021	431,128	73,997	533,372	777,354	93,184	1,036,271	1,446,453	13
487,364	608,119	189,842	824,399	1,054,042	291,259	767,332	1,157,914	14
13,420	79,164	14,996	19,879	83,655	20,731	4,276	76,042	15
8,333	87,726	32,009	15,151	224,058	47,257	12,164	260,157	16
440	58,203	6,365	20	103,141	88,569	12,823	223,871	17
335	24,934	1,168	15	36,807	35,225	3,357	94,214	18
1,470	3,271	—	382	6,211	—	196	8,516	19
1,690	47,266	24,597	5	60,997	17,194	198	66,254	20
159	709,722	272,249	323	816,911	313,141	25	617,812	21
93	29,712	17,270	60	138,297	20	465	31,596	22
1,759	22,234	3,386	996	29,049	190	449	57,915	23
2,653	5,854	—	69	577	—	—	50	
18,261	75,173	84,445	29,829	234,062	36,260	36,123	175,144	
1,996,634	4,585,987	1,077,976	4,432,767	7,850,843	1,596,930	3,948,445	8,055,083	
351,069	622,501	135,658	375,830	656,499	193,339	410,137	898,921	24
12,316	71,487	4,728	2,813	63,561	895	443	64,385	25
307	6,497	1,857	480	18,439	2,348	7	20,694	26
3,286	84,125	22,604	5,193	194,280	21,644	75	217,650	27
42	17,362	1,137	65	43,626	115	197	42,523	28
689	201,764	10,362	480	298,596	1,223	1,066	310,608	29
49,601	2,359,284	548,231	64,017	2,284,781	733,292	90,971	2,765,137	30
10,664	445,536	72,419	12,297	329,308	85,466	20,251	361,950	31
14,106,128	15,138,327	222,963	18,836,245	20,130,455	689	23,221,367	23,564,808	32
59,891,120	64,635,627	762,245	67,742,776	72,667,826	3,072	87,346,673	88,711,451	33
1,217,403	2,306,525	666,202	1,534,250	2,411,233	835,479	2,288,965	3,389,186	
65,709	168,155	3,982	101,139	194,210	—	2,455	176,145	
2,017	162,625	149,503	53,245	391,100	136,934	28,506	422,013	
16,540	1,264,654	1,214,237	255,248	2,887,376	1,094,668	147,745	3,153,515	
263,067	355,545	47,892	400,060	521,551	68,231	396,099	573,072	
61,480,794	69,533,418	2,804,671	70,054,256	79,567,941	2,110,678	90,203,772	96,957,962	

¹Unrevised figures.

12.—Exports of Canada to United Kingdom, United States and All Countries in quan-

No.	Principal articles by classes.	1921.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
IV. Wood, Wood Products and Paper—concluded.					
	Logs and round timber—				
1	Fence posts..... \$	—	158,915	158,915	—
2	Logs, cedar..... M ft.	—	19,326	19,561	—
			476,643	484,097	—
3	Logs, hardwood..... \$	95,504	219,791	320,775	40,200
4	Logs, spruce..... \$	284	187,924	192,545	—
5	Logs, all other, n.o.p..... \$	305,004	346,785	652,514	5,936
6	Masts and spars..... \$	—	140	23,426	25
7	Piling..... Lin. ft.	—	1,964,795	2,022,764	—
			251,950	275,434	—
8	Poles, hop, hoop, telegraph and other.... \$	—	487,424	490,359	—
9	Railroad ties..... No.	912,136	1,401,269	2,545,251	—
		1,303,196	1,396,580	3,273,714	—
	Saw-mill and planing-mill products—				
10	Planks and boards..... M ft.	428,059	1,061,977	1,604,463	113,223
		20,449,773	45,107,422	71,079,295	5,346,363
11	Timber, square, Douglas fir..... M ft.	3,391	3,723	34,892	1,851
		169,459	105,824	1,293,524	42,038
12	Timber, square, white pine..... M ft.	1,961	77	2,042	1,339
		215,631	3,585	219,653	177,814
13	Timber, square, other, n.o.p..... \$	246,297	53,757	319,559	75,103
14	Other lumber, n.o.p..... \$	114,035	136,241	291,683	159,984
	Other saw-mill and planing-mill products—				
15	Knees and futtocks..... \$	—	8,180	8,706	—
16	Laths..... M	7	414,067	428,644	12
		65	3,636,924	3,767,830	90
17	Pickets..... \$	11,315	539,512	576,483	2,760
18	Shingles..... M	32	1,796,865	1,831,659	241
		199	9,058,127	9,230,581	1,054
19	Shooks..... \$	203,072	90,262	1,068,390	52,857
	Other unmanufactured wood—				
20	Firewood..... cord	—	29,025	29,368	—
		—	116,471	118,973	—
21	Pulpwood..... cord	—	1,615,467	1,615,467	—
		—	21,513,594	21,513,594	—
22	Spoolwood..... \$	764,203	99,328	863,531	804,401
23	Other articles of forest produce..... \$	—	37,010	37,010	2,003
	Total wood and wood products, unmanufactured..... \$	23,878,037	84,032,389	115,263,581	6,710,628
	Wood and wood products, manufactured—				
24	Cooperage, barrels, empty..... \$	200	45,661	52,934	3,896
25	Pails, tubs, churns and other hollow wood- enware..... \$	9,920	15,531	49,701	3,377
26	Staves and headings..... \$	29,945	105,699	198,356	470
	Wood pulp—				
27	Sulphate (kraft)..... cwt.	—	2,328,839	2,354,002	—
		—	12,046,063	12,160,735	—
28	Sulphite, bleached..... cwt.	27,906	1,606,834	1,941,922	1,697
		264,581	12,820,526	15,195,065	13,740
29	Sulphite, unbleached..... cwt.	835,891	3,531,184	4,785,040	346,179
		4,160,567	21,583,349	27,704,419	1,291,656
30	Mechanically ground pulp..... cwt.	1,397,783	3,268,653	5,282,042	1,787,778
		3,472,454	11,552,473	16,491,818	5,218,426
	Other manufactures of wood—				
31	Doors, sashes and blinds..... \$	79,550	8,103	212,087	39,224
32	Furniture..... \$	271,729	57,929	804,964	9,122
33	Handles, all kinds..... \$	22,095	86,076	137,988	22,347
34	Matches..... \$	1,856	9	121,157	—
35	Mouldings, trimmings, etc..... \$	42,741	16,174	75,328	1,290
36	All other manufactures of wood..... \$	494,678	914,118	2,051,819	831,521
	Total wood manufactured..... \$	8,859,316	59,251,721	75,256,371	7,435,069
	Total Wood, Wood Products and Paper..... \$	36,761,384	216,011,556	284,561,478	15,664,295

titles and values by classes of home produce in the four fiscal years 1921-1924—con.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
38,020	38,020	—	66,934	66,934	—	92,037	92,037	1
56,440	77,932	14	57,377	86,947	—	37,937	140,637	2
1,004,228	1,469,695	717	1,205,405	1,931,452	—	814,077	2,799,485	3
111,899	152,099	47,954	145,161	196,663	79,914	210,556	304,591	4
411,534	415,354	—	179,198	180,261	—	286,655	287,657	5
706,080	729,413	2,245	1,307,871	1,357,294	6,733	2,346,444	2,699,223	6
36	5,272	—	42	5,611	—	—	6,542	7
1,068,281	1,102,430	—	1,237,315	1,459,930	—	1,672,830	1,941,859	8
116,884	122,699	—	107,535	130,019	—	185,402	224,612	9
743,999	751,679	—	1,282,996	1,300,591	—	2,456,184	2,469,721	10
511,040	1,214,411	3,229	485,970	929,497	—	769,641	1,102,809	11
510,157	1,071,892	9,091	376,902	699,378	—	548,915	851,234	12
933,862	1,158,630	315,699	1,748,478	2,199,133	284,373	1,836,756	2,349,853	13
30,637,830	39,012,295	10,398,367	49,727,219	64,020,422	10,791,102	58,104,459	76,043,496	14
3,171	46,934	2,019	7,641	51,811	11,505	17,530	118,084	15
55,125	1,147,410	64,840	154,641	1,173,988	352,288	418,351	3,314,923	16
—	1,797	2,026	53	2,079	2,744	201	3,320	17
—	203,247	191,599	1,351	192,950	260,856	8,035	280,214	18
45,490	300,518	154,743	48,632	292,501	284,745	945,759	1,479,494	19
355,667	585,027	173,614	281,960	522,547	94,970	193,186	366,523	20
4,986	4,986	—	5,882	6,051	—	18,120	18,120	21
961,170	971,070	844	1,379,711	1,401,297	1,059	1,592,170	1,611,923	22
6,038,779	6,092,657	5,905	8,167,961	8,313,267	7,260	9,716,066	9,836,960	23
243,799	263,114	19,375	484,813	524,910	7,479	501,651	518,032	24
2,217,474	2,231,904	64	2,599,691	2,622,035	21	2,484,757	2,519,734	25
7,592,181	7,632,418	318	10,463,921	10,528,319	74	9,104,345	9,206,873	26
53,974	602,740	40,941	14,207	543,309	6,887	8,330	677,433	27
12,097	12,257	—	11,723	11,912	—	23,033	23,136	28
82,742	83,712	—	69,183	70,333	—	148,303	148,990	29
825,967	825,967	—	1,096,462	1,096,462	—	1,444,693	1,444,693	30
9,879,150	9,879,150	—	10,755,655	10,755,655	—	14,322,714	14,322,714	31
32,900	840,529	387,629	41,105	428,734	370,111	40,150	410,261	32
54,135	95,159	20,030	102,880	266,990	169,573	253,702	586,925	33
58,719,845	71,505,085	11,517,368	84,991,454	103,508,179	12,431,992	100,723,441	126,946,062	34
28,296	48,549	—	6,643	29,138	—	4,442	29,833	35
17,297	22,824	5,137	—	6,171	2,890	69	3,649	36
19,742	26,687	450	12,426	35,419	9,614	25,856	57,154	37
2,373,760	2,377,556	—	2,961,275	2,961,275	—	3,023,104	3,023,104	38
7,880,357	7,906,872	—	9,262,393	9,262,393	—	9,521,234	9,521,234	39
1,703,400	1,859,501	1,051	2,968,032	3,182,625	224	2,971,103	3,224,350	40
7,440,411	8,325,617	4,477	12,311,574	13,073,289	974	12,263,572	13,119,317	41
2,140,573	2,861,470	854,517	2,996,755	4,459,028	679,459	3,311,540	4,550,227	42
6,561,128	9,236,296	1,888,864	7,684,263	11,098,374	1,813,458	9,015,616	12,401,068	43
3,297,127	5,336,710	1,857,508	3,927,527	6,385,895	1,784,734	4,238,495	6,509,200	44
4,713,491	10,456,092	2,771,164	5,967,306	9,542,892	2,966,424	7,397,834	11,132,177	45
2,140	119,346	15,468	512	130,195	55,651	716	249,761	46
89,657	230,124	25,101	75,353	228,140	31,196	24,356	211,406	47
205,233	239,555	15,029	132,119	160,529	22,311	78,617	120,828	48
—	88,989	102,517	153	157,423	—	122,483	151,625	49
1,388	7,094	1,003	4,615	7,639	3,416	2,633	13,653	50
554,824	1,556,838	547,464	484,264	1,291,984	956,551	383,055	1,530,126	51
27,513,964	38,264,883	5,376,671	35,941,521	45,023,586	5,862,485	38,840,483	48,551,833	52
148,065,673	179,925,887	19,834,368	191,363,061	228,756,205	20,598,494	230,177,833	273,354,778	53

¹ Unrevised figures.

12.—Exports of Canada to United Kingdom, United States and All Countries in quan-

No.	Principal articles by classes.	1921.			United Kingdom.
		United Kingdom.	United States.	All Countries.	
V. Iron and its Products.					
1	Chromite (chromic iron)..... ton	—	8,246	8,246	—
	\$	—	151,769	151,769	—
2	Iron ore..... ton	—	17,972	17,972	20
	\$	—	93,197	93,197	10
Farm Implements and Machinery—					
3	Cream separators and parts of..... \$	2,635	78,675	157,208	618
4	Harvesters and binders..... No.	1,486	1,835	13,413	342
	\$	300,889	389,928	2,826,657	70,708
5	Hay rakes..... No.	240	283	3,815	192
	\$	8,358	22,712	168,453	7,771
6	Mowing machines..... No.	1,102	2,580	13,766	443
	\$	78,367	209,472	1,005,453	35,832
7	Reapers..... No.	25	—	1,761	—
	\$	2,996	—	204,381	—
8	Cultivators..... No.	102	892	7,160	18
	\$	6,476	94,273	488,133	965
9	Drills..... No.	80	30	2,974	—
	\$	10,117	4,237	421,847	—
10	Harrows..... No.	1,059	726	11,809	448
	\$	19,208	43,878	355,339	10,757
11	Ploughs and parts of..... \$	441,786	1,199,839	3,628,386	73,956
12	Seeders..... \$	—	1,267	27,291	—
13	Garden and farm tools..... \$	82,735	706	289,679	44,653
14	Spades and shovels..... \$	562	116,909	255,001	33
15	Threshing machines, separators and parts of..... \$	4,038	804,648	818,052	—
16	Other farm implements and machines.... \$	91,903	76,441	514,313	34,145
17	Parts of farm implements and machines, n.o.p..... \$	133,006	396,164	1,367,180	92,204
Total farm implements and machinery..... \$		1,183,076	3,439,119	12,527,373	371,642
Engines and boilers—					
18	Internal combustion engines and parts of. No.	109	81	718	38
	\$	120,434	48,490	262,775	118,169
19	Locomotives and parts of..... \$	—	27,960	3,472,594	—
20	Steam engines and parts of..... \$	—	—	—	—
Hardware and cutlery—					
21	Bolts and nuts..... cwt.	15,858	4,012	32,197	2,974
	\$	174,555	29,302	344,877	17,638
22	Cutlery..... \$	1,435,093	9,342	1,535,106	560,956
23	Hardware, n.o.p..... \$	133,944	145,733	697,983	4,350
24	Nails, brads, spikes and tacks, all kinds.. cwt.	17,587	10,182	87,633	400
	\$	137,479	75,745	677,172	5,128
25	Nails, wire..... cwt.	303,762	144,574	604,713	2,122
	\$	1,907,864	938,777	3,871,470	14,680
26	Needles and pins, all kinds..... \$	1,774	55,047	85,335	286
27	Screws, all kinds..... \$	76,452	664	120,098	30
Total hardware and cutlery..... \$		3,867,161	1,254,610	7,332,041	603,068
Machinery (except agricultural)—					
28	Adding and calculating machines..... \$	71,907	5,208	396,507	45,038
29	Lawn mowers..... No.	20,838	1	21,952	3,423
	\$	110,599	5	120,229	20,222
30	Linotype machines and parts of..... \$	5,000	3,998	20,210	—
31	Sewing machines and parts of..... \$	117,358	99,670	896,988	76,176
32	Typewriters..... No.	2,406	49	3,978	1,480
	\$	203,080	5,571	332,720	119,684
33	Washing machines, domestic, and wringers	182,278	3,843	195,079	17,560
34	Other machinery and parts of, n.o.p..... \$	734,474	1,935,735	3,807,755	406,812
Total machinery (except agricultural)..... \$		1,424,696	2,054,030	5,769,488	685,492

titles and values by classes of home produce in the four fiscal years 1921-1924—con.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
1,750	1,750	—	1,302	1,302	—	3,221	3,221	1
21,201	21,201	—	16,431	16,431	—	56,745	56,745	2
4,765	4,765	—	2,207	2,207	—	7,765	7,765	2
16,058	16,158	—	12,510	12,510	—	27,871	27,871	2
41,175	192,432	2,802	90,008	176,190	5,683	43,052	82,185	3
6	2,161	326	3	5,925	1,265	3	11,066	4
2,549	449,013	54,064	608	1,091,206	221,268	2,955	2,066,038	5
1	1,229	91	3	913	389	50	2,475	5
25	49,239	3,047	147	37,826	13,197	1,601	107,134	6
39	4,943	400	2	8,091	1,031	115	18,889	6
2,277	369,762	24,611	93	525,889	63,779	6,774	1,263,483	7
—	115	—	—	93	5	—	1,709	7
—	12,901	—	—	99,434	528	—	150,120	8
316	3,005	15	980	1,800	1	935	4,077	8
28,324	180,158	1,185	88,760	125,685	120	82,232	251,715	9
25	3,168	202	41	3,653	13	3	3,355	9
3,443	499,700	18,343	5,001	603,316	1,451	175	482,398	10
245	3,742	1	1,848	2,540	676	1,342	5,731	10
19,015	134,063	40	72,934	95,966	13,279	67,600	190,187	11
253,720	1,465,919	9,873	609,476	1,086,411	26,495	110,236	1,119,827	11
313	5,141	226	309	6,327	—	640	18,546	12
550	95,504	53,339	32	168,489	72,385	2,369	230,962	13
35,253	195,555	10	27,183	177,301	21	2,594	243,460	14
131,741	688,609	—	279,548	694,128	528	215,668	1,334,793	15
19,386	221,843	9,308	18,874	261,217	36,213	46,328	517,358	16
45,234	785,469	114,133	154,367	917,508	204,712	230,066	1,281,313	17
583,005	5,345,308	290,981	1,346,840	6,066,893	659,679	812,290	9,339,519	
326	649	22	187	283	137	15	357	18
40,789	220,555	3,017	39,400	56,823	17,937	13,075	90,112	19
3,487	1,207,411	—	1,584,875	1,699,590	—	930,747	1,023,307	19
3,811	52,190	—	21,014	22,000	—	7,485	30,980	20
847	9,127	3,755	483	8,936	14,862	496	23,033	21
5,751	69,414	27,192	4,376	64,971	106,615	4,533	172,618	22
1,465	804,709	106,285	1,141	208,470	91,328	296	1,124,764	22
32,600	89,554	38,011	61,550	148,197	5,117	104,006	162,457	23
2,258	14,152	325	1,699	24,708	1,201	1,114	32,234	24
19,567	105,708	4,215	11,105	151,184	12,562	6,686	216,672	25
5,039	23,267	27,876	8,237	137,507	51,007	12,844	240,057	25
36,655	123,696	108,815	36,401	535,310	197,585	55,971	963,006	26
39,049	46,594	12,886	8,319	26,005	75,868	309	142,433	26
163	13,449	—	104	4,921	1,355	2,625	29,811	27
135,250	1,253,124	297,404	122,996	1,139,058	490,430	174,426	2,811,761	
3,877	126,199	35,104	4,625	119,151	46,126	590	255,081	28
1	4,012	2,127	31	3,777	2,844	—	7,256	29
6	26,819	16,131	238	31,206	15,172	—	50,485	30
17,051	19,126	—	4,516	4,516	—	3,584	3,584	30
112,485	715,569	192,166	71,333	876,571	8,286	16,474	1,515,051	31
38	2,631	1,625	25	1,698	2	27	74	32
3,010	201,920	134,119	1,742	138,934	563	2,355	4,848	33
1,536	22,685	41,929	318	42,876	41,773	235	43,287	33
557,233	1,468,700	311,789	540,274	1,246,953	351,648	932,107	1,883,580	34
695,198	2,581,018	731,238	623,046	2,460,207	463,568	955,345	3,755,916	

¹Unrevised figures.

12.—Exports of Canada to United Kingdom, United States and All Countries in quan-

No.	Principal articles by classes.	1921.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
V. Iron and its Products—concluded.					
Rolling mill products, n.o.p.—					
1	Bars and rods..... ton	39,885	4,178	69,340	94
	\$	2,597,318	293,715	4,872,203	20,095
2	Rails..... ton	—	40,267	55,852	—
	\$	—	1,595,714	2,447,854	—
3	Plates and sheets..... \$	—	—	—	—
4	Structural steel..... ton	—	1,600	3,585	—
	\$	—	172,015	424,165	—
	Total rolling mill products, n.o.p. \$	2,597,318	2,961,444	7,744,222	20,095
5	Tubing and pipe..... \$	345,553	137,224	3,106,170	354,639
Pigs, ingots, blooms and billets—					
6	Billets, ingots and blooms..... ton	49,137	1,787	50,925	—
	\$	2,809,015	103,425	2,912,471	—
7	Ferro-silicon, etc..... ton	1,344	16,748	21,045	421
	\$	82,364	833,748	1,059,576	27,097
8	Pig iron..... ton	18,902	51,221	70,160	224
	\$	779,413	1,852,581	2,634,153	4,208
	Total pigs, ingots, etc. \$	3,670,792	2,789,754	6,696,200	31,302
Vehicles—					
9	Automobiles, freight..... No.	619	4	4,290	97
	\$	643,344	3,750	2,602,853	45,496
10	Automobiles, passenger..... No.	1,358	796	15,620	2,804
	\$	1,422,518	1,037,386	11,376,268	1,810,384
11	Automobiles, parts of..... \$	86,137	1,870,093	4,262,325	363,160
12	Bicycles and parts of..... \$	26,306	2,556	229,428	492
13	Cars and coaches, railway, and parts of..... \$	—	18,487	953,339	—
14	Other vehicles, n.o.p..... \$	36,671	277,114	395,901	3,299
	Total vehicles. \$	2,215,000	3,209,387	19,820,115	2,222,831
Wire—					
15	Wire, barbed..... cwt.	—	2	19,513	—
	\$	—	1 ¹ / ₂	134,187	—
16	Wire, woven fencing..... \$	105,793	8,742	144,167	28,527
17	Other wire, n.o.p..... \$	629,062	487,576	1,992,797	77,389
	Total wire. \$	734,855	496,330	2,271,151	105,916
Other iron and its products—					
18	Castings, n.o.p..... \$	19,813	806,976	845,736	2,718
19	Forgings..... \$	17,306	846,236	863,545	1,924
20	Furniture..... \$	41,078	2,567	114,247	32,346
21	Guns, rifles and firearms, all kinds..... \$	28,674	3,866	31,207	1,101
22	Lamps and lanterns..... \$	26,014	7,252	67,907	44,472
23	Scales and weighing beams..... \$	14,413	21,915	113,116	5,701
24	Scrap iron and steel..... \$	150,677	1,251,787	1,442,747	7,090
25	Stoves, all kinds..... \$	12,186	34,793	141,161	8,197
26	Tinware and enameled ware..... \$	4,556	55,944	73,445	1,582
27	Tools, hand or machine, n.o.p..... \$	143,139	75,863	538,967	93,584
28	Other manufactures of iron and steel, n.o.p. \$	1,039,085	759,864	3,111,568	43,018
	Total Iron and its Products. \$	17,653,826	19,630,413	76,500,741	4,758,888
VI. Non-ferrous Metals and their Products.					
29	Aluminium, in bars, blocks, etc..... cwt.	36,288	98,678	140,051	323
	\$	1,154,260	3,138,471	4,417,999	6,767
30	Aluminium, manufactures of..... \$	2,037	29,119	228,820	290
Brass and its products—					
31	Brass, old and scrap..... cwt.	107	21,335	21,442	—
	\$	1,176	270,433	271,609	—
32	Brass in bars, rods, sheets, tubing, etc.... cwt.	30	30	82	63
	\$	1,200	1,681	3,428	1,972
33	Brass valves..... \$	146,490	2,675	324,001	89,314
34	Brass, mfrs. of, n.o.p..... \$	—	—	—	5,198
	Total brass and its products. \$	148,866	274,789	599,038	96,481

titles and values by classes of home produce in the four fiscal years 1921-1924—con.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
324	5,432	2	557	10,134	2,050	3,448	34,367	1
19,231	277,096	127	24,934	404,539	79,657	187,274	1,503,101	2
16,742	16,833	—	10,751	14,461	—	12,145	22,193	3
685,442	689,103	—	290,325	417,613	—	326,442	568,305	4
4,555	5,231	—	2,829	3,598	—	3,708	11,475	
229	1,235	—	220	466	—	130	4,057	
17,892	152,770	—	12,705	43,071	—	10,231	442,419	
727,120	1,124,200	127	330,793	868,821	79,657	527,655	2,525,300	
16,939	1,232,039	104,000	28,101	1,266,306	180,994	12,339	1,992,156	5
16	16	93	—	148	—	—	621	6
912	912	2,032	—	3,754	—	—	22,016	7
10,187	11,083	133	23,380	23,646	—	28,695	28,776	8
506,407	568,583	9,321	943,006	962,528	—	1,027,285	1,033,685	
2,287	2,511	—	40,813	40,813	—	45,000	45,084	
49,219	53,424	—	833,221	833,221	—	1,008,453	1,010,265	
556,538	622,919	11,353	1,776,227	1,799,503	—	2,035,738	2,065,966	
8	1,296	67	5	3,720	2,446	18	15,396	9
8,450	611,185	50,612	1,689	1,444,549	1,057,541	12,826	5,496,272	10
100	13,428	12,845	143	45,108	8,086	150	54,522	
57,902	7,421,619	9,110,752	73,402	25,606,350	5,575,140	60,368	27,246,025	
116,129	1,151,453	425,597	134,952	2,355,066	663,338	435,225	4,162,787	
900	9,704	125	1,998	24,126	215	2,329	92,735	
300,625	2,777,735	—	217,167	234,267	—	910,208	950,397	
126,493	142,151	25	43,394	60,983	1,025	16,111	85,190	
610,499	12,113,847	9,587,111	472,607	29,725,341	7,297,259	1,437,067	38,033,406	
—	11,458	560	2	123,890	—	—	70,400	15
—	42,832	1,631	6	456,837	—	—	278,608	
222	41,852	82,683	370	105,720	152,854	1,017	204,187	16
3,627	242,887	164,084	24,156	1,438,814	175,157	22,823	1,520,300	17
3,849	327,571	248,398	24,532	2,001,371	328,011	23,846	2,003,095	
171,055	197,647	145	256,176	266,901	208	250,774	259,524	18
50,932	52,856	1,211	399,070	402,366	9,990	309,339	319,367	19
3,029	57,488	17,089	273	28,818	9,812	1,389	40,061	20
1,569	11,405	772	204	1,022	1,809	210	2,244	21
1,507	58,031	100,368	482	113,410	90,419	1,089	110,326	22
14,306	84,442	400	10,629	52,181	1,133	6,876	48,453	23
658,868	706,510	—	2,065,797	2,142,627	—	1,221,699	1,237,224	24
24,212	62,108	11,860	23,766	74,212	8,908	42,165	106,738	25
7,164	59,383	496	2,744	49,925	778	3,166	55,112	26
112,811	336,001	60,754	66,603	268,936	48,989	39,304	296,418	27
211,324	521,857	89,903	184,149	602,660	182,955	201,337	743,970	28
4,693,020	28,312,272	11,556,627	9,409,265	51,137,912	9,872,536	9,091,971	66,975,571	
30,365	60,306	7,475	121,391	145,155	16,497	80,999	155,915	29
577,153	1,188,808	136,929	2,077,072	2,506,182	361,336	1,639,483	3,225,479	30
14,293	322,799	1,025	27,398	361,669	11,637	58,710	996,133	
33,853	33,930	—	73,733	73,736	564	56,563	57,127	31
199,752	200,214	—	551,614	551,643	5,156	457,359	462,515	32
30	93	—	3	3	—	10	10	
398	2,370	—	55	55	—	302	302	
1,601	133,871	111,983	502	167,897	106,264	1,269	182,575	33
7,652	19,329	15,647	15,293	42,072	16,738	12,781	47,125	34
209,463	355,784	127,630	567,461	761,667	128,158	471,711	692,517	

¹ Unrevised figures.

12.—Exports of Canada to United Kingdom, United States and All Countries in quan-

No.	Principal articles by classes.	1921.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
VI. Non-ferrous Metals and their Products—concluded.					
1	Copper and its products— Copper, fine, contained in ore, matte, regulus, etc..... cwt.	87,042	274,637	361,679	50,870
	\$	653,780	3,683,192	4,336,972	382,451
2	Copper, blister..... cwt.	—	346,903	346,903	—
	\$	—	7,589,849	7,589,849	—
3	Copper, pig, old and scrap..... cwt.	—	5,289	5,289	—
	\$	—	76,814	76,814	—
4	Copper in bars, sheets, plates, wire, etc... \$	635,512	74,542	1,310,454	35,040
	Total copper and its products..... \$	1,289,292	11,424,397	13,314,089	417,491
5	Lead and its products— Lead, metallic, contained in ore, etc..... cwt.	—	74,603	74,603	—
	\$	—	358,978	358,978	—
6	Lead in pigs, etc..... cwt.	—	1	36,505	78,912
	\$	—	17	166,678	369,083
	Total lead and its products..... cwt.	—	74,604	111,108	78,912
	\$	—	358,995	525,656	369,083
7	Nickel, cobalt and their products— Cobalt, metallic..... lb.	22,459	118,853	142,432	—
	\$	62,889	276,372	342,061	—
8	Cobalt, alloys..... lb.	9,929	1,120	11,049	5,754
	\$	49,160	5,374	54,534	31,511
9	Nickel, fine, contained in ore, matte or speiss..... cwt.	111,188	293,785	408,337	55,366
	\$	1,899,696	5,259,977	7,233,925	950,677
10	Nickel, fine..... cwt.	1,209	43,437	61,846	5
	\$	42,784	1,522,994	2,171,366	153
	Total nickel, cobalt and their products..... \$	2,054,529	7,061,717	9,801,886	962,341
Precious metals and their products—					
11	Gold-bearing quartz, nuggets, etc..... \$	195	3,036,084	3,038,779	326
12	Silver contained in ore, concentrates. etc. oz.	—	2,441,270	2,441,270	—
	\$	—	1,870,244	1,870,244	—
13	Silver bullion..... oz.	5,386,464	2,254,931	10,889,780	5,610,024
	\$	4,401,852	1,726,602	9,257,188	3,634,297
14	Other articles..... \$	1,000	381,355	382,355	200
	Total precious metals and their products..... \$	4,403,047	7,014,285	14,548,566	3,634,823
15	Zinc and its products..... \$	292,146	86,129	963,962	189,499
16	Electric apparatus..... \$	341,003	139,237	651,461	152,731
17	Miscellaneous non-ferrous metal products..... \$	188,336	499,660	887,900	168,097
	Total Non-ferrous Metals and their Products..... \$	9,873,516	30,029,799	45,939,377	5,997,576
VII. Non-metallic Minerals and their Products					
18	Clay and clay products..... \$	4,678	240,128	323,989	1,804
19	Coal and its products— Coal..... ton	81,477	1,031,870	2,227,202	350,019
	\$	941,299	6,287,861	16,501,478	2,720,872
20	Coke..... ton	—	37,790	38,031	—
	\$	—	399,620	402,435	—
21	Tar and pitch..... gal.	—	738,035	8,622,210	34
	\$	—	50,400	571,773	10
22	Cinders..... \$	—	105	105	—
	Total coal and its products..... \$	941,299	6,737,986	17,475,791	2,720,882
23	Graphite and its products..... \$	1,892	118,501	120,473	85
24	Mica and its products..... \$	45,050	611,023	660,218	21,826
25	Petroleum and its products— Oil, coal and kerosene, refined..... gal.	—	215,214	553,566	—
	\$	—	27,219	79,625	—
26	Oil, coal and kerosene, crude..... gal.	292,936	1,154,627	2,424,142	1,493,682
	\$	32,135	144,164	295,784	98,503
27	Oil, mineral, n.o.p..... gal.	140	91,476	190,036	77
	\$	95	19,929	87,326	73

titles and values by classes of home produce in the four fiscal years 1921-1924—con.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
52,469	103,339	146,790	67,723	214,513	117,854	331,798	449,652	1
646,966	1,029,417	1,203,191	832,320	2,035,511	883,702	3,870,711	4,754,413	2
292,727	292,727	—	378,492	378,492	—	441,252	441,252	3
4,241,468	4,241,468	—	4,946,976	4,946,976	—	5,999,858	5,999,858	4
23,876	50,857	—	30,738	30,758	240	37,371	37,998	5
221,662	579,531	—	343,742	343,892	2,311	435,194	441,667	6
111,222	478,689	15,665	70,201	374,649	6,548	166,131	704,007	7
5,221,318	6,329,105	1,218,856	6,193,239	7,701,028	892,561	10,471,894	11,900,045	8
44,867	44,867	—	104,258	104,258	—	83,843	83,843	9
175,781	175,781	—	531,960	531,960	—	563,560	563,560	10
37	364,312	17,961	9	380,324	186,784	14,483	614,679	11
157	1,543,186	81,063	68	1,834,507	1,048,217	91,409	3,397,649	12
44,904	499,179	17,961	104,267	484,582	186,784	98,326	698,522	13
175,938	1,718,967	81,063	532,028	2,365,467	1,048,217	651,963	3,961,239	14
32,818	59,410	1,401	172,502	173,903	87,154	148,374	257,363	15
98,222	141,134	3,203	441,601	444,804	203,626	362,847	599,103	16
—	7,078	2,035	—	2,769	—	—	117	17
—	38,369	10,382	—	14,392	—	—	625	18
6,505	62,943	163,683	50,321	221,389	197,567	94,873	324,880	19
120,900	1,076,192	2,497,413	630,938	3,289,693	3,102,208	880,995	4,567,228	20
22,407	46,104	7,071	166,281	204,896	2,873	216,063	244,512	21
780,345	1,613,510	169,326	4,538,467	5,590,948	61,164	4,228,596	4,821,283	22
999,467	2,869,205	2,680,324	5,611,006	9,339,837	3,366,998	5,472,438	9,988,239	23
2,531,724	2,532,050	—	5,449,469	5,449,469	1,000	17,383,028	17,384,090	24
3,211,653	3,211,653	—	6,009,885	6,012,624	—	4,890,032	5,053,919	25
2,031,383	2,031,383	—	3,965,121	3,967,030	—	3,057,126	3,161,612	26
3,558,371	10,839,767	4,015,212	4,230,339	11,098,792	4,050,117	4,472,852	12,894,347	27
2,241,301	6,679,921	2,729,068	2,805,669	7,491,962	2,624,199	2,909,825	8,378,171	28
283,039	284,209	1,000	202,528	203,528	3,365	377,699	381,064	29
7,087,447	11,526,593	2,730,068	12,422,787	17,111,983	2,628,564	23,727,678	23,304,937	30
2,477	2,448,741	461,264	—	2,136,885	711,005	—	2,553,733	31
97,897	485,321	464,958	75,225	1,199,427	942,589	101,309	1,833,710	32
301,867	640,673	204,915	383,480	872,886	155,170	858,848	1,405,169	33
11,687,269	27,885,996	8,107,032	27,889,699	44,353,037	10,246,235	43,457,040	65,911,171	34
91,746	257,624	4,973	130,579	364,785	7,079	184,636	554,739	35
1,188,326	1,953,053	39,259	1,672,411	2,089,438	52,006	632,250	1,217,835	36
7,095,769	13,182,440	320,559	9,929,931	12,956,615	374,235	3,673,123	7,842,259	37
26,647	26,671	—	15,329	15,351	—	36,709	36,729	38
300,003	300,457	—	156,209	156,295	—	493,332	493,520	39
965,921	300,578	—	477,239	2,396,099	—	529,969	4,864,474	40
61,137	248,155	—	47,005	280,443	—	51,088	643,242	41
316	316	—	1,916	1,916	—	4,963	4,963	42
7,157,225	13,731,368	320,559	13,135,061	13,395,274	374,235	4,222,506	8,983,984	43
41,057	41,149	83	19,012	19,167	170	49,074	50,144	44
205,444	230,429	19,426	566,118	589,424	21,584	704,490	737,851	45
2,407	1,482,560	—	4,000	1,553,550	—	—	1,516,511	46
656	209,930	—	1,190	147,116	—	—	146,270	47
2,462,005	7,435,539	348,095	2,854,980	5,737,542	283,342	336,561	1,239,889	48
139,201	424,533	17,740	132,318	253,439	14,427	23,425	80,693	49
421,995	473,963	150	962,137	1,037,009	915	1,030,446	1,178,805	50
70,090	93,225	281	130,188	166,823	270	180,955	237,757	51

¹Unrevised figures.

12.—Exports of Canada to United Kingdom, United States and All Countries in quan-

		1921.			
No.	Principal articles by classes.	United Kingdom.	United States.	All Countries.	United Kingdom.
VII. Non-metallic Minerals and their Products—concluded.					
Petroleum and its products—concluded.					
1	Oil, gasoline and naphtha..... gal.	-	204,044	349,883	-
	\$	-	51,290	100,547	-
2	Wax, mineral..... cwt.	8,963	9,210	22,281	-
	\$	83,917	75,717	194,642	-
	Total petroleum and its products..	\$ 116,147	318,319	766,924	98,576
Stone and stone products—					
3	Abrasives..... \$	16,424	1,901,681	1,946,601	1,289
4	Building and paving stone..... \$	5,265	37,939	48,712	50
5	Cement..... cwt.	300	1,869,609	2,811,127	-
	\$	197	1,148,476	2,107,180	-
6	Gypsum or plaster, crude..... ton	-	253,098	253,098	-
	\$	-	427,053	427,053	-
7	Lime..... cwt.	-	475,801	477,537	-
	\$	-	409,253	411,683	-
8	Plaster of Paris, ground, etc..... \$	-	163,664	222,015	-
9	Sand and gravel..... ton	-	1,503,575	1,503,607	-
	\$	-	193,113	193,163	-
10	Other stone products..... \$	-	54,111	54,111	-
	Total stone and stone products....	\$ 21,886	4,335,290	5,410,518	1,339
Asbestos products—					
11	Asbestos..... ton	12,467	113,985	154,152	2,288
	\$	1,337,357	8,036,276	12,255,793	311,357
12	Asbestos sand and waste..... ton	155	36,827	37,147	21
	\$	3,025	370,721	377,596	189
13	Asbestos, manufactures of..... \$	16,669	72,856	321,694	2,722
	Total asbestos products.....	\$ 1,357,051	8,479,853	12,955,083	314,268
Miscellaneous non-metallic minerals—					
14	Feldspar..... ton	-	41,272	41,312	1
	\$	-	248,054	249,854	30
15	Glass and glassware, n.o.p..... \$	409,314	230,239	935,575	86,417
16	Magnesite, crude, refined, etc..... \$	221,395	127,330	355,747	5,051
17	Pyrites and sulphur contained in pyrites.. ton	-	119,106	119,106	-
	\$	-	458,340	458,340	-
18	Talc, crude and refined..... \$	-	201,286	202,923	-
19	Other non-metallic minerals and products \$	8,626	164,098	206,457	3,059
	Total Non-metallic Minerals and their Products.....	\$ 3,127,338	22,270,447	40,121,892	3,253,427
VIII. Chemicals and Allied Products.					
20	Acids..... \$	419,630	310,015	1,069,667	20,939
21	Alcohol, wood..... gal.	113,205	198,022	411,296	95,717
	\$	173,868	541,229	784,228	105,544
22	Other non-potable spirits, n.o.p..... gal.	-	-	-	13,439
	\$	-	-	-	17,684
23	Extract of hemlock bark..... \$	31,300	202	33,957	28,868
24	Medicinal and proprietary preparations.... \$	555,804	25,215	968,968	214,169
25	Explosives..... \$	-	627,401	1,271,702	-
Fertilizers—					
26	Ammonium sulphate..... cwt.	7,082	20,752	300,013	2,804
	\$	40,726	96,141	1,519,262	7,809
27	Cyanamide..... cwt.	-	882,524	883,127	-
	\$	-	3,015,645	3,018,057	-
28	Other fertilizers, manufactured, n.o.p.... \$	-	451,253	455,857	-
	Total fertilizers.....	\$ 40,726	3,563,042	4,993,176	7,809
29	Paints, pigments and varnishes..... \$	934,439	154,055	1,756,045	162,903
30	Soap..... \$	24,260	2,474	143,627	138,882
Inorganic chemicals, n.o.p.—					
31	Acetate of lime..... cwt.	53,147	10,755	80,922	-
	\$	178,529	30,087	261,578	-
32	Calcium carbide..... cwt.	27,088	973,177	1,086,138	1
	\$	110,390	4,159,844	4,618,335	4
33	Cobalt oxide and cobalt salts..... lb.	171,599	140,115	415,764	11,212
	\$	399,420	306,352	891,045	23,549
34	Soda and sodium compounds ¹ cwt.	-	-	-	112
	\$	-	-	-	365

¹ Included in other chemicals, n.o.p., 1921.

titles and values by classes of home produce in the four fiscal years 1921-1924—con.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
16,895	569,436	900	709,459	1,996,719	—	109,866	1,217,725	1
5,337	160,850	207	211,046	514,435	—	25,091	263,220	2
6	48	29	31,410	43,396	1,107	38,042	46,777	3
123	343	299	105,986	132,166	3,596	122,031	148,927	4
215,407	888,881	18,527	580,728	1,213,979	18,293	351,502	876,862	5
477,496	487,755	3,193	2,038,007	2,057,423	208,670	2,904,823	3,167,811	6
22,589	46,383	—	50,013	53,427	—	50,466	70,960	7
23,391	810,448	4	578,495	1,544,254	67,264	960,364	1,653,685	8
24,481	578,474	3	322,233	719,882	34,367	527,553	790,249	9
222,671	222,671	—	343,098	343,098	—	404,110	404,110	10
404,987	404,987	—	523,296	523,296	—	591,393	591,393	11
227,607	231,493	—	322,179	329,125	—	565,733	571,695	12
217,991	222,805	—	304,636	313,666	—	473,535	479,258	13
40,625	67,166	—	47,758	66,754	—	53,336	96,451	14
1,386,004	1,386,034	—	683,976	683,996	—	763,514	763,514	15
200,994	201,094	—	118,654	118,679	—	182,195	182,195	16
5,357	5,357	—	78,783	78,783	—	159,038	159,038	17
1,394,520	2,014,021	3,196	3,483,410	3,931,910	243,037	4,942,339	5,537,355	18
47,178	63,287	2,827	82,652	105,336	3,761	112,355	143,718	19
2,397,609	4,397,332	261,725	4,578,470	6,486,340	260,791	5,546,769	7,640,923	20
24,376	24,446	270	60,235	61,250	1,497	81,737	84,298	21
235,151	235,868	3,064	607,727	621,086	25,605	994,500	1,037,241	22
93,823	153,830	9,793	61,097	81,507	1,389	52,645	64,462	23
2,726,583	4,787,030	274,582	5,247,294	7,188,933	287,785	6,593,914	8,742,626	24
22,553	22,584	5	24,674	24,679	3	30,225	30,264	25
146,756	147,866	120	164,531	164,651	18	206,656	207,303	26
96,603	266,054	78,865	255,407	484,204	169,655	320,425	679,561	27
17,210	23,066	2,717	21,286	24,003	—	6,562	6,562	28
7,875	7,875	—	—	—	—	9,889	9,889	29
31,500	31,500	—	—	—	—	47,595	47,595	30
138,672	138,949	1,970	134,414	137,759	2,860	84,946	88,517	31
42,309	58,747	3,656	79,848	132,615	—	—	—	32
12,605,032	22,616,684	728,674	23,817,688	27,646,704	1,218,676	17,748,619	26,776,330	33
66,558	90,116	470,595	110,082	600,937	1,074,816	306,758	1,454,327	34
10	213,653	69,774	14,273	99,312	118,276	31	125,395	35
16	210,734	51,349	12,195	78,219	109,909	57	118,661	36
6	19,420	21,616	3,928	26,567	—	4,428	6,241	37
6	24,409	15,607	6,110	22,893	—	7,211	9,220	38
15,109	46,944	19,623	4,578	26,172	1,580	30	2,910	39
14,173	497,595	215,337	25,379	420,362	274,176	13,843	513,362	40
199,831	249,789	32	53,209	247,476	—	384	218,198	41
93,258	338,066	—	24,518	211,066	—	90,121	308,780	42
204,543	785,187	—	66,583	654,889	—	218,505	861,758	43
357,695	357,695	—	1,106,462	1,109,664	—	1,211,641	1,217,846	44
903,233	903,233	—	2,895,775	2,903,659	—	3,218,065	3,236,298	45
522,004	524,931	—	335,737	341,348	—	272,633	274,860	46
1,629,780	2,213,351	—	3,298,095	3,899,896	—	3,709,203	4,372,916	47
89,908	423,604	177,651	70,360	469,742	175,237	68,041	547,043	48
3,517	227,788	227,965	1,251	300,890	491,206	310	644,436	49
13,130	22,109	12,981	4,211	22,416	22,868	7,902	47,182	50
15,561	28,373	40,618	8,962	66,167	72,336	26,160	155,593	51
478,885	513,650	1,303	457,700	590,545	—	107,388	199,824	52
2,122,083	2,261,054	7,860	1,834,140	2,358,160	—	403,999	762,860	53
164,717	302,336	101,946	265,034	453,203	161,992	210,662	404,054	54
339,747	538,083	172,546	527,446	874,429	251,186	404,711	792,341	55
113,252	196,776	11,213	189,387	441,856	11,648	280,984	585,470	56
840,443	1,491,018	89,472	1,296,368	3,244,359	84,186	1,916,167	4,021,682	57

¹ Unrevised figures.

12.—Exports of Canada to United Kingdom, United States and All Countries in quan-

No.	Principal articles by classes.	1921.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
VIII. Chemicals and Allied Products—concluded.					
Inorganic chemicals, n.o.p.—concluded.					
1	Other inorganic chemicals..... \$	16,800	250,759	351,537	4,877
	Total inorganic chemicals, n.o.p.... \$	705,139	1,747,042	6,122,495	28,795
2	Other drugs, dyes and chemicals, n.o.p.... \$	514,679	2,265,412	3,222,414	337,164
	Total Chemicals and Allied Products \$	3,399,815	12,236,087	20,366,279	1,062,757
IX. Miscellaneous Commodities—					
3	Amusement and sporting goods..... \$	32,569	32,323	98,631	8,069
4	Containers—packages, all kinds, empty.... \$	—	16,063	27,959	9,280
Household and personal equipment—					
5	Brooms and whisks..... \$	22,820	161	57,327	9,096
6	Jewelry, all kinds, n.o.p..... \$	140,393	20,832	282,690	23,901
7	Stationery..... \$	105,135	22,613	305,662	53,710
8	Other articles..... \$	22,476	212,054	326,209	3,983
	Total household and personal equipment..... \$	290,833	255,660	971,888	90,690
9	Mineral waters..... \$	—	12,785	16,480	—
Musical instruments—					
10	Organs..... No.	210	4	580	40
	\$	24,875	30,680	86,221	4,531
11	Pianos..... No.	583	104	1,581	47
	\$	191,073	41,373	487,978	18,814
12	Other and parts of..... \$	118,527	46,504	377,127	7,450
	Total musical instruments..... \$	334,475	118,557	951,326	30,795
Scientific and educational equipment—					
13	Cameras..... \$	215,558	771	244,223	141,497
14	Films for photographers' use and for moving pictures..... \$	54,871	2,378,524	2,493,694	15,632
15	Philosophical and scientific apparatus and instruments..... \$	105,552	34,546	199,587	33,619
	Total scientific equipment, etc..... \$	375,981	2,413,841	2,937,594	190,748
Ships and vessels—					
16	Boats, canoes and parts of..... \$	20,818	80,004	129,294	2,078
17	Gasoline launches..... No.	—	54	56	4
	\$	—	43,118	44,718	2,810
18	Ships sold to other countries..... ton	12,723	6,531	46,595	—
	\$	4,840,000	1,637,000	17,175,123	—
	Total ships and vessels..... \$	4,860,818	1,760,122	17,349,135	4,888
Vehicles, n.o.p.—					
19	Aeroplanes and parts of..... \$	1,735	56,562	60,247	456
20	Buggies, carriages and parts, carts and wagons..... \$	150	4,380	24,658	435
	Total vehicles, n.o.p..... \$	1,885	60,942	84,905	891
21	Works of art (paintings)..... \$	17,541	78,432	96,114	14,479
Other miscellaneous commodities, n.o.p.—					
22	Brushes, all kinds..... \$	37,122	1,349	214,917	18,020
23	Cartridges, gun, rifle and pistol..... \$	11,949	1,072	52,674	2,223
24	Contractors' outfits..... \$	3,695	69,790	74,285	14,562
25	Junk, except metallic and rubber..... cwt.	—	65,956	65,956	—
	\$	—	184,787	184,787	—
26	Settlers' effects..... \$	907,729	7,574,512	8,822,207	580,931
27	Other miscellaneous..... \$	50,336	150,619	506,857	69,216
	Total Miscellaneous Commodities.. \$	6,924,933	12,730,854	32,389,669	1,035,792
	Total Exports, Canadian Mdse..... \$	312,844,871	542,322,967	1,189,163,701	299,361,675

titles and values by classes of home produce in the four fiscal years 1921-1924—con.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
156,657	223,168	1,995	243,182	328,510	2,162	337,527	441,024	1
3,474,491	4,541,696	312,491	3,910,098	6,871,625	409,870	3,088,564	6,174,400	
443,747	980,144	493,791	460,186	1,108,728	651,393	423,119	1,295,483	2
5,937,136	9,506,170	1,984,441	7,951,543	14,046,940	3,188,187	7,617,520	15,319,956	
27,891	52,912	1,711	27,043	44,227	8,068	29,588	54,409	3
74,677	107,571	691	61,555	207,100	22,215	313,896	477,001	4
85	24,657	3,570	78	23,293	1,995	4,767	27,523	5
8,174	80,021	6,965	4,954	21,162	4,933	5,353	20,891	6
16,170	163,745	19,224	14,222	107,481	18,728	12,437	108,261	7
132,379	166,356	12,194	77,802	117,712	22,336	69,688	147,732	8
156,808	434,779	41,953	97,056	269,648	45,997	87,478	276,884	
58,904	63,329	—	105,275	113,548	703	214,300	219,515	9
11	216	47	15	173	58	16	228	10
54,575	72,517	7,150	177,893	195,225	5,740	156,272	189,646	
92	273	26	89	267	20	142	533	11
38,502	103,118	13,850	36,264	97,641	8,645	50,275	164,420	
70,934	178,704	21,627	94,611	268,520	19,702	103,827	341,614	12
161,011	354,339	42,627	398,768	561,386	34,087	310,374	695,689	
260	153,212	686,980	25,402	742,020	724,986	5,847	764,206	13
2,245,754	2,352,235	707,964	2,182,715	2,948,739	2,313,364	200,730	2,578,674	14
28,632	115,221	8,403	16,242	39,401	26,288	18,876	65,188	15
2,274,646	2,620,668	1,403,347	2,224,359	3,730,160	3,064,638	225,453	3,408,068	
32,806	45,049	600	23,004	41,037	3,231	15,788	30,447	16
20	38	3	9	20	1	6	15	17
63,447	82,957	1,800	15,542	22,506	800	12,208	17,702	
—	7,396	—	596	1,165	—	64	859	18
—	3,114,200	—	56,247	109,747	—	15,400	40,400	
96,253	3,242,206	2,400	94,793	173,290	4,031	43,396	88,549	
37,349	38,375	—	3,797	3,797	—	105	105	19
1,661	16,914	—	1,620	27,010	279	802	14,363	20
39,010	55,289	—	5,417	30,807	279	907	14,468	
57,179	72,563	18,937	49,661	69,407	127,485	88,028	216,188	21
3,394	73,990	30,375	1,373	72,276	54,428	1,629	110,141	22
1,271	15,070	193	49,081	83,811	507	686	8,609	23
47,479	66,146	—	92,896	152,646	—	39,718	332,511	24
37,456	37,456	—	54,260	54,260	—	80,636	80,636	25
117,891	117,891	—	165,112	165,112	—	197,032	197,032	
5,346,795	6,408,583	687,356	6,635,367	7,971,002	614,074	9,846,503	10,795,941	26
159,116	344,665	91,614	181,400	408,648	134,177	139,158	467,737	27
8,625,325	14,030,001	2,321,204	10,099,156	14,053,068	4,110,689	11,538,146	17,362,733	
292,588,643	740,240,680	379,067,415	369,080,218	931,451,443	369,094,021	430,715,496	1,045,141,056	

¹ Unrevised figures.

13.—Imports of Canada from the United Kingdom, the United States and in the four fiscal

No.	Principal articles by classes.	1921.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
I. Agricultural and Vegetable Products (except chemicals, fibres and wood).					
A—MAINLY FOOD.					
	Fruits, fresh—				
1	Apples..... brl.	—	273,319	273,319	—
	\$	—	1,528,606	1,528,606	—
2	Apricots, quinces, etc..... lb.	20	630,399	630,419	—
	\$	12	57,038	57,050	—
3	Bananas..... bunch	—	1,706,288	1,706,288	—
	\$	—	5,415,511	5,415,511	—
4	Cherries..... lb.	—	477,265	477,265	—
	\$	—	108,737	108,737	—
5	Cranberries..... brl.	—	21,841	21,841	—
	\$	—	173,634	173,634	—
6	Grape fruit or shaddocks..... \$	—	741,167	791,726	—
7	Grapes..... lb.	600,414	5,979,961	6,632,035	608,080
	\$	129,113	717,711	858,340	109,960
8	Lemons and limes..... \$	2,416	867,468	1,005,616	4,290
9	Oranges..... \$	4,777	6,159,339	6,322,543	8,414
10	Peaches..... lb.	120	6,195,284	6,195,404	540
	\$	58	442,207	442,265	219
11	Pears..... lb.	—	12,482,288	12,484,934	—
	\$	—	797,381	797,645	—
12	Pineapples..... \$	—	328,915	329,006	—
13	Plums..... bush.	16	106,747	106,763	10
	\$	230	476,229	476,459	170
14	Melons..... No.	12	3,244,734	3,245,339	—
	\$	6	453,648	453,711	—
15	Strawberries..... lb.	—	2,436,573	2,436,573	—
	\$	—	559,777	559,777	—
16	Fruits, other, fresh..... \$	—	78,336	80,854	1,977
	Total fruits, fresh..... \$	136,612	18,905,703	19,401,480	125,030
	Fruits, dried—				
17	Apricots..... lb.	—	686,862	687,051	—
	\$	—	164,497	164,531	—
18	Currants..... lb.	132,246	975,707	4,934,917	219,697
	\$	23,279	152,332	849,893	29,670
19	Dates..... lb.	284,370	3,742,638	4,097,068	1,086,558
	\$	35,174	556,722	603,346	84,276
20	Figs..... lb.	46,456	1,896,701	2,670,145	158,657
	\$	3,612	238,743	337,432	13,461
21	Peaches..... lb.	—	1,154,843	1,154,843	—
	\$	—	210,351	210,351	—
22	Prunes and plums, unpitted..... lb.	—	10,489,100	10,494,520	—
	\$	—	1,458,027	1,459,102	—
23	Raisins..... lb.	83,838	20,390,188	24,979,194	99,109
	\$	19,016	4,363,940	5,482,589	16,126
24	All other fruits, dried..... lb.	—	1,532,710	1,734,400	—
	\$	—	117,878	162,997	—
	Total fruits, dried..... lb.	546,910	40,868,749	50,752,138	1,564,021
	\$	81,081	7,262,490	9,270,241	143,533
25	Fruit juices..... gal.	24,658	32,644	109,252	16,812
	\$	53,601	114,011	185,754	17,617
	Fruits, otherwise prepared—				
26	Citron, lemon and orange rinds in brine \$	53,093	10,194	72,522	14,836
27	Fruit in air-tight cans, etc..... lb.	88,976	13,390,570	19,383,538	64,118
	\$	10,959	1,950,243	2,795,868	8,160
28	Jellies, jams and preserves, n.o.p..... lb.	860,011	242,458	1,434,109	570,751
	\$	224,160	75,846	397,745	107,718
29	Olives in brine and otherwise..... gal.	—	49,606	138,854	—
	\$	—	70,839	193,166	—
	Total fruits, prepared..... \$	288,212	2,107,122	3,459,301	130,714
	Grand total fruits..... \$	559,506	28,389,326	32,316,776	416,954

All Countries in quantities and values, by classes entered for consumption, years 1921-1924.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
110,702	110,702	-	165,201	165,201	-	195,685	195,693	1
680,832	680,832	-	775,819	775,819	-	878,333	878,415	2
1,078,530	1,078,530	-	2,041,653	2,041,728	-	1,624,103	1,624,103	3
76,438	76,438	-	136,112	136,130	-	105,443	105,443	4
2,159,381	2,159,860	-	2,212,679	2,219,114	-	2,143,368	2,169,002	5
5,210,811	5,211,098	-	4,205,718	4,215,766	-	4,789,907	4,859,460	6
503,108	503,108	-	494,697	494,697	-	625,313	625,313	7
92,591	92,591	-	83,349	83,349	-	105,978	105,978	8
16,953	16,953	-	20,344	20,344	-	25,727	25,727	9
200,634	200,668	-	212,894	212,894	-	220,013	220,013	10
656,302	711,993	304	796,635	849,055	-	686,308	728,641	11
6,917,481	7,669,621	704,456	6,836,059	7,698,005	588,165	10,469,102	11,202,740	12
695,235	831,522	75,275	565,377	661,443	80,200	773,348	872,941	13
1,158,298	1,446,444	57,413	885,238	1,474,673	14,961	725,383	1,157,639	14
6,335,104	6,594,107	111,307	5,394,528	5,840,941	18,876	5,529,647	5,871,752	15
10,927,509	10,928,049	216	10,865,780	10,866,101	-	13,405,866	13,405,896	16
583,231	583,450	88	403,198	403,312	-	510,707	510,710	17
10,367,293	10,370,281	400	15,251,313	15,256,255	-	17,804,789	17,804,789	18
584,399	584,599	49	566,421	566,729	-	782,464	782,464	19
451,715	453,018	-	505,766	508,231	-	515,739	530,304	20
106,447	106,457	3	111,081	111,086	-	140,208	140,208	21
404,299	404,469	58	303,408	303,495	-	374,450	374,450	22
3,267,624	3,267,818	72	3,912,782	3,913,076	-	3,356,442	3,356,682	23
384,985	385,038	20	333,792	333,827	-	379,452	379,467	24
2,660,392	2,666,692	-	6,122,758	6,122,758	-	5,014,267	5,014,267	25
510,468	511,413	-	785,150	785,150	-	740,699	740,699	26
96,720	105,993	1,918	161,704	204,237	4,147	66,981	133,071	27
18,122,082	18,873,673	246,432	16,115,160	17,355,159	118,184	17,184,852	18,253,447	28
639,203	640,113	-	605,322	605,712	-	1,854,444	1,855,326	29
115,011	115,179	-	126,176	126,244	-	167,806	167,933	30
983,008	7,195,245	45,599	1,641,136	5,193,976	88,629	503,880	5,598,777	31
126,100	1,117,955	4,331	199,748	634,465	7,993	55,224	554,310	32
5,275,925	6,461,995	925,609	6,239,534	7,225,012	504,811	6,963,248	7,538,801	33
670,068	766,042	74,492	622,145	701,963	27,587	584,716	618,679	34
2,367,336	3,637,348	166,379	2,016,140	3,612,481	37,168	2,186,092	3,965,443	35
286,042	454,461	9,653	199,976	296,771	3,449	212,634	355,124	36
1,459,687	1,459,687	10	2,065,398	2,065,408	-	1,819,162	1,819,162	37
176,929	176,929	1	268,562	268,563	-	152,791	152,791	38
13,702,978	13,705,795	48	13,806,997	13,993,275	1,892	13,274,311	13,370,621	39
1,277,912	1,278,539	16	1,324,294	1,335,200	265	965,329	971,290	40
24,177,923	27,666,692	105,496	30,646,915	32,044,480	210,949	35,690,194	38,792,039	41
4,422,809	5,132,755	10,077	3,426,146	3,644,419	15,760	2,899,499	3,222,162	42
878,277	1,192,582	3,094	1,738,339	1,936,033	8,198	2,322,861	2,492,823	43
66,523	109,396	298	114,954	144,346	1,416	157,113	181,086	44
49,481,337	61,959,357	1,246,235	58,759,781	66,676,377	851,647	64,614,192	75,432,992	45
6,961,394	9,151,256	98,868	6,282,001	7,151,971	56,470	5,193,112	6,223,375	46
28,072	77,768	8,915	40,147	98,682	4,061	41,193	75,799	47
131,390	170,404	19,608	135,315	173,418	7,832	101,467	121,242	48
4,495	24,136	12,551	7,596	33,982	23,240	1,038	45,524	49
6,261,354	8,096,222	84,217	9,535,186	12,480,511	91,821	9,288,614	14,731,445	50
765,172	970,308	5,998	993,702	1,248,531	9,726	991,055	1,427,157	51
88,175	774,548	1,504,919	170,036	1,775,685	1,369,444	72,830	1,688,797	52
35,731	173,271	225,528	30,631	282,198	207,059	21,309	285,532	53
73,243	181,858	-	66,147	192,215	-	74,210	171,890	54
67,550	145,029	-	58,298	163,910	-	82,253	178,690	55
872,948	1,312,744	244,077	1,090,293	1,728,687	240,025	1,095,690	1,936,938	56
26,087,814	29,598,077	608,985	23,622,769	26,409,235	422,511	23,575,121	26,535,002	57

¹ Unrevised figures.

13.—Imports of Canada from the United Kingdom, the United States and in the four fiscal

No.	Principal articles by classes.	1921.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
I. Agricultural and Vegetable Products (except chemicals, fibres and wood)—con.					
A—MAINLY FOOD—continued.					
Nuts—					
1	Cocoanuts and preparations.....	\$ 111,212	87,491	562,975	29,057
2	Not shelled.....	\$ 47,869	991,632	1,467,250	25,363
3	Shelled.....	\$ 184,465	1,050,542	2,859,069	81,868
	Total nuts.....	\$ 343,546	2,129,665	4,889,294	136,288
4	Vegetables, fresh and dried.....	\$ 111,409	4,117,026	4,444,056	142,672
5	Vegetables, canned.....	lb. 6,918	6,356,482	8,293,193	4,375
		\$ 1,616	632,159	1,124,041	958
6	Sauces and pickles.....	gal. 98,921	83,111	299,827	114,087
		\$ 264,584	128,936	500,148	252,389
Grains and farinaceous products—					
7	Beans, n.o.p.....	bush. 4,075	151,518	203,725	5,002
		\$ 21,165	497,458	637,632	20,614
8	Corn (Indian) for purpose of distillation.....	bush. —	318,804	318,804	—
		\$ —	344,467	344,467	—
9	Corn (Indian) not for purpose of distillation.....	bush. 10	9,520,482	9,658,960	26
		\$ 23	12,084,398	12,276,943	68
10	Oats.....	bush. —	939,734	939,955	1,266
		\$ —	660,433	661,030	1,835
11	Peas.....	bush. 22	62,450	67,339	3
		\$ 266	234,848	248,200	14
12	Rice, uncleaned, unhulled or paddy.....	lb. —	7,779,558	34,990,378	—
		\$ —	644,692	2,640,824	—
13	Rice, cleaned.....	lb. 41,100	10,879,583	15,598,940	203,740
		\$ 2,510	800,650	1,140,264	10,049
14	Wheat.....	bush. —	134,109	134,113	—
		\$ —	280,250	280,266	—
15	Other grains.....	\$ —	44,160	44,309	183
	Total grains.....	\$ 23,964	15,591,456	18,273,935	32,763
Milled products—					
16	Cornmeal.....	brl. —	28,627	28,630	—
		\$ —	207,610	207,616	—
17	Rice and cassava flour, rice meal, etc....	lb. 2,220	328,903	416,284	10,048
		\$ 349	32,917	41,680	1,127
18	Sago and tapioca flour.....	lb. 38,970	1,301,088	2,137,141	157,218
		\$ 2,071	76,711	125,610	6,238
19	Wheat flour.....	brl. 1	27,554	27,583	10
		\$ 12	269,366	269,867	127
20	Other breadstuffs.....	\$ 29,300	172,697	202,988	35,879
	Total milled products.....	\$ 31,732	759,301	847,761	43,371
Prepared foods and bakery products—					
21	Biscuits, sweetened.....	lb. 201,817	54,141	276,792	125,369
		\$ 87,727	14,277	107,758	47,720
22	Biscuits, not sweetened.....	lb. 199,133	421,420	780,532	309,151
		\$ 26,929	54,945	99,418	31,377
23	Bread, passover.....	\$ —	103,772	103,772	—
24	Cereal foods, prepared, in packages not exceeding 25 lb.....	lb. 34,491	629,025	670,047	54,667
		\$ 8,740	70,618	80,669	11,477
25	Cereal foods prepared, n.o.p.....	\$ 4,973	32,120	37,713	1,472
26	Macaroni and vermicelli.....	lb. 200	850,778	911,004	—
		\$ 24	111,550	119,676	—
27	Milk food and other similar preparations.....	\$ 73,883	480,908	556,673	45,152
	Total prepared foods and bakery products.....	\$ 202,276	868,190	1,105,679	137,198

All Countries in quantities and values, by classes entered for consumption, years 1921-1924—con.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
40,895	422,513	6,054	18,260	337,336	12,233	13,388	375,879	1
827,179	1,304,739	25,582	661,895	1,042,855	16,882	674,355	1,065,441	2
1,028,312	2,807,032	105,955	751,839	2,348,284	70,106	524,549	2,443,128	3
1,896,386	4,534,284	137,591	1,431,994	3,728,475	99,221	1,212,292	3,884,448	
3,167,938	3,539,491	112,947	3,221,929	3,579,782	81,066	3,671,299	3,965,485	4
3,747,153	6,407,327	1,276	5,572,932	7,890,537	925	6,481,066	9,270,126	5
371,480	889,913	298	471,911	806,286	166	626,417	965,449	6
59,911	299,311	142,565	81,205	339,986	176,584	87,393	410,609	6
98,706	460,447	310,161	128,751	518,666	319,172	137,193	548,766	6
60,726	148,157	68,804	32,140	329,974	31,354	43,587	298,647	7
197,876	376,792	150,817	97,045	777,214	70,495	135,268	754,090	7
365,417	365,417	—	133,305	133,305	—	496,978	496,978	8
230,941	230,941	—	100,040	100,040	—	452,703	452,703	8
13,755,545	13,755,571	5	10,841,657	10,867,016	96	8,530,059	8,729,438	9
8,482,336	8,482,404	8	7,673,041	7,695,280	271	7,367,271	7,540,396	9
118,065	119,334	581	1,062,656	1,063,336	3	185,120	185,362	10
70,157	71,993	597	412,732	413,406	9	91,143	91,400	10
26,302	33,810	825	32,811	52,245	1,411	26,755	42,603	11
86,286	106,334	3,046	115,660	167,893	2,914	126,558	161,043	11
11,932,192	37,232,644	2,500	9,213,294	32,874,729	1,324,300	22,056,055	50,299,605	12
436,506	1,393,035	82	376,521	1,103,420	45,274	841,438	1,860,382	12
13,899,306	21,254,638	986,995	10,435,530	22,110,838	759,644	7,612,021	16,523,234	13
660,141	978,164	40,412	473,093	917,176	36,746	352,894	693,010	13
371,651	371,656	—	84,816	84,818	—	47,063	47,175	14
522,029	522,071	—	90,954	90,958	—	56,581	56,641	14
24,351	24,585	1,730	8,560	10,295	1,332	6,045	7,489	15
10,710,653	12,186,319	196,692	9,347,646	11,275,682	157,041	9,430,499	11,617,752	
35,960	35,960	—	32,200	32,203	—	38,436	38,436	16
136,263	136,263	—	120,752	120,812	—	180,929	180,929	16
93,927	175,749	46,222	57,138	207,972	24,144	168,553	287,289	17
8,535	16,010	4,562	4,182	16,834	2,419	13,076	22,886	17
966,281	1,642,167	119,929	745,979	1,674,100	117,346	546,297	1,005,622	18
28,854	47,847	4,648	51,689	57,867	3,867	29,672	44,295	18
29,751	39,900	4	54,012	54,060	220	87,144	87,378	19
271,407	273,159	36	337,764	338,197	1,459	464,368	465,977	19
155,407	191,190	29,450	122,704	152,185	28,464	126,013	140,904	20
600,133	664,469	38,696	617,121	685,895	35,509	813,518	867,365	
43,937	192,629	86,770	141,210	249,262	104,361	235,528	359,295	21
11,540	66,108	33,038	30,324	69,745	37,237	38,622	79,847	21
260,061	597,109	524,833	277,788	835,214	499,196	351,463	878,656	22
39,496	76,309	44,154	42,433	91,490	47,870	54,060	106,648	22
138,302	138,302	—	110,633	110,633	—	94,604	94,604	23
867,464	932,694	52,451	934,697	993,062	142,119	1,126,404	1,274,440	24
89,235	102,566	12,019	85,512	99,022	24,498	89,141	115,112	24
26,434	28,645	439	24,964	25,955	533	25,962	27,233	25
886,129	1,096,752	290	1,123,016	1,249,498	2,800	1,255,616	1,626,014	26
93,826	114,810	32	102,514	115,638	231	109,269	133,418	26
355,062	402,356	44,342	261,408	309,356	98,394	223,771	323,472	27
753,895	929,096	134,024	657,788	821,839	208,763	635,429	880,334	

¹ Unrevised figures.

13.—Imports of Canada from the United Kingdom, the United States and in the four fiscal

No.	Principal articles by classes.	1921.			United Kingdom.
		United Kingdom.	United States.	All Countries.	
I. Agricultural and Vegetable Products (except chemicals, fibres and wood)—con.					
A—MAINLY FOOD—concluded.					
Other kindred products—					
1	Arrowroot..... lb.	4,830	13,582	141,789	4,588
	\$	784	1,207	13,226	757
2	Malt, whole, crushed or ground..... lb.	1,980	7,229,715	7,231,695	2,640
	\$	226	319,088	319,314	224
3	Sago and tapioca..... lb.	55,327	441,998	2,704,340	21,170
	\$	5,360	17,658	139,015	963
4	All other breadstuffs, n.o.p..... \$	4,358	285,357	314,156	8,697
	Total grains and farinaceous products..... \$	268,700	17,842,257	21,013,086	223,973
5	Oils, total vegetable..... \$	120,896	803,145	1,273,489	31,326
Sugar and its products—					
6	Candy and confectionery..... lb.	878,860	1,283,907	2,483,597	1,497,753
	\$	325,963	396,796	802,230	409,161
7	Molasses and syrups, n.o.p..... \$	96,696	611,452	6,991,666	52,146
8	Sugar, cane, beet, etc..... lb.	5,048,448	167,844,267	706,825,703	3,120
	\$	972,724	20,471,605	78,276,334	283
	Total sugar and its products..... \$	1,395,383	21,479,853	86,070,230	461,590
Cocoa and chocolate—					
9	Cocoa beans, not roasted, crushed or ground..... cwt.	9,778	61,117	116,269	29,301
	\$	150,832	858,586	1,717,316	286,839
10	Cocoa paste, cocoa or chocolate preparations..... lb.	1,121,305	705,908	1,863,549	443,134
	\$	412,120	126,510	554,031	96,064
11	Cocoa butter..... lb.	427,161	2,688,156	3,257,725	869,111
	\$	171,633	876,043	1,105,314	268,304
	Total cocoa and chocolate..... \$	734,555	1,861,139	3,376,661	651,207
Coffee and chicory—					
12	Coffee, green, imported direct..... lb.	1,358,714	—	16,293,945	971,438
	\$	433,612	—	3,814,097	185,848
13	Coffee, other, and chicory..... lb.	71,217	1,120,465	1,497,430	24,985
	\$	28,051	390,718	470,403	11,489
	Total coffee and chicory..... lb.	1,429,931	1,120,465	17,791,375	996,423
	\$	461,663	390,718	4,234,500	197,337
14	Spices..... \$	599,257	431,443	1,275,076	520,088
15	Tea..... lb.	12,058,587	326,589	33,422,902	12,390,354
	\$	3,886,382	85,684	9,668,785	3,632,505
16	Vinegar..... gal.	36,508	68,921	113,280	34,515
	\$	29,208	16,082	50,030	28,255
17	Yeast..... lb.	—	1,577,500	1,577,564	—
	\$	—	465,421	465,453	—
18	Hops..... lb.	57,436	1,498,185	1,681,822	45,951
	\$	48,289	843,507	1,000,711	39,940
19	Vegetable products, n.o.p. (mainly food)... \$	11,396	176,310	189,511	19,133
	Total agricultural and vegetable products (mainly food)..... \$	8,836,420	79,792,671	171,941,847	6,754,612

All Countries, in quantities and values, by classes entered for consumption, years 1921-1924—con.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
39,614	184,993	6,924	11,496	202,366	6,466	45,612	206,524	1
4,000	13,552	1,350	961	15,337	1,073	4,734	19,470	2
9,653,719	9,656,359	—	13,023,137	13,023,137	5,280	13,071,917	13,077,197	3
275,541	275,765	—	320,473	320,473	300	335,941	336,241	4
226,235	3,882,792	250,473	58,846	3,428,940	299,334	122,171	4,082,731	5
10,669	128,985	12,638	3,663	129,438	16,651	9,158	227,785	6
151,361	176,529	6,808	152,914	174,769	8,260	120,096	140,503	7
12,506,252	11,374,715	390,208	11,100,566	13,423,433	427,597	11,349,375	14,089,450	8
433,344	763,744	27,070	350,834	710,335	52,741	245,208	728,017	9
1,080,747	3,131,802	1,602,051	1,399,993	3,407,270	1,880,735	953,282	3,356,278	10
197,281	725,523	376,552	204,783	650,304	442,568	197,362	717,427	11
404,755	2,090,692	60,387	385,730	2,783,737	72,679	522,094	3,306,240	12
166,444,888	883,283,112	21,366	120,024,763	1,146,543,348	1,368,008	147,421,126	860,150,157	13
9,058,292	41,624,693	1,777	3,432,022	36,187,815	94,071	8,216,589	48,780,459	14
9,660,328	44,449,911	438,716	4,022,535	39,611,856	699,318	8,937,571	52,807,551	15
71,541	163,978	24,751	47,131	160,856	28,307	52,688	174,949	16
687,282	1,557,382	223,340	521,536	1,617,986	217,313	494,188	1,482,565	17
640,118	1,149,967	51,214	1,018,895	1,159,448	71,540	1,320,221	1,462,777	18
91,992	205,301	13,735	88,444	116,481	24,824	79,970	117,165	19
3,688,213	5,124,467	188,305	2,518,283	4,438,882	107,895	829,130	4,812,116	20
999,839	1,430,214	52,406	742,719	1,254,535	24,023	217,563	1,107,571	21
1,779,113	3,192,897	289,481	1,352,699	2,989,002	266,160	791,721	2,707,301	22
—	20,049,318	540,949	—	20,457,493	617,523	—	21,091,068	23
—	3,020,763	109,019	—	3,211,067	121,262	—	3,308,590	24
1,612,420	1,696,237	46,904	1,091,418	1,175,677	41,997	1,071,272	1,143,199	25
452,659	471,048	19,027	349,879	372,942	13,951	404,358	422,132	26
1,612,420	21,745,555	587,853	1,091,418	21,633,170	659,520	1,071,272	22,234,267	27
452,659	3,491,811	128,046	349,879	3,584,009	135,213	404,358	3,730,722	28
433,125	1,219,832	517,658	407,537	1,180,265	507,264	407,300	1,193,429	29
275,189	38,844,703	9,440,856	450,706	40,278,205	10,304,072	269,910	39,725,559	30
55,727	9,132,093	2,833,134	78,170	10,356,757	3,671,459	57,527	12,504,104	31
55,080	98,276	52,802	63,013	123,472	62,043	88,124	160,788	32
10,048	43,189	37,556	13,458	55,032	40,329	24,022	70,427	33
1,764,055	1,764,108	—	1,895,530	1,895,707	1,152	1,750,298	1,751,500	34
578,397	578,540	—	568,374	568,429	248	530,124	530,396	35
2,055,543	2,141,702	66,145	3,121,909	3,380,265	78,649	2,625,667	2,831,828	36
688,153	778,958	47,542	605,406	697,814	43,456	867,877	930,723	37
258,351	397,128	22,786	387,777	482,386	34,000	397,956	479,790	38
58,477,911	117,346,030	5,992,179	48,114,589	198,701,762	6,709,921	53,235,361	123,671,069	39

¹ Unrevised figures.

13.—Imports of Canada from the United Kingdom, the United States and in the four fiscal

No.	Principal articles by classes.	1921.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
I. Agricultural and Vegetable Products (except chemicals, fibres and wood)—con.					
B—OTHER THAN FOOD.					
Beverages, alcoholic—					
Brewed.					
1	Ale, porter, etc..... gal.	62,669	11,162	74,105	42,306
	\$	127,387	15,919	143,737	103,051
Distilled.					
2	Brandy, etc..... gal.	9,012	1,965	355,557	1,669
	\$	96,491	20,815	3,379,275	31,832
3	Cordials and liqueurs, all kinds..... gal.	4,351	563	45,165	3,095
	\$	62,556	4,806	312,521	71,373
4	Gin, all kinds, n.o.p..... gal.	197,667	360	816,105	82,449
	\$	2,026,542	4,025	4,174,925	1,549,972
5	Rum..... gal.	53,630	5,935	329,271	15,872
	\$	288,942	13,274	1,033,794	250,466
6	Vermouth..... gal.	3,989	493	43,640	1,471
	\$	19,928	2,882	134,738	8,103
7	Whiskey..... gal.	1,627,337	178,094	1,891,056	836,711
	\$	20,353,005	1,553,404	22,947,000	16,950,638
8	All spirituous or alcoholic liquors, n.o.p..... gal.	1,031	20,791	73,420	152
	\$	9,505	63,990	242,454	3,206
Total distilled beverages..... gal.		1,897,017	208,201	3,554,214	941,419
\$		22,856,963	1,663,196	32,224,707	18,865,590
Fermented.					
Wines—					
9	Wines, non-sparkling..... gal.	23,723	50,216	625,682	26,588
	\$	129,265	79,996	1,652,568	102,555
10	Champagne and all other sparkling wines in bottles..... doz.	2,898	90	30,390	958
	\$	94,970	1,207	625,195	32,554
Total wines..... \$		221,235	81,023	2,277,763	135,109
Total beverages, alcoholic..... \$		23,208,593	1,763,138	34,646,207	19,103,750
Gums and resins—					
11	Arabic, amber, etc..... lb.	270,594	185,308	506,749	91,411
	\$	52,303	80,466	146,086	14,644
12	Australian, copal, damar, etc..... lb.	76,197	1,848,760	2,149,778	28,962
	\$	25,223	392,798	452,557	6,293
13	Chicle or sappato gum, crude..... lb.	—	293,243	514,910	—
	\$	—	131,676	265,902	—
14	Lac, crude, seed, button, stick and shell.. lb.	77,529	836,488	1,032,175	1,792
	\$	70,498	790,069	958,671	466
15	Resin or rosin in packages..... cwt.	336	267,879	268,333	1
	\$	2,201	1,461,322	1,464,778	6
16	Other gums and resins..... \$	38,109	323,996	372,739	25,082
Total gums and resins..... \$		188,334	3,180,327	3,660,733	46,491
17	Oil cake and meal..... cwt.	1,578	186,236	187,862	500
	\$	10,757	490,278	501,165	1,650
Oils, vegetable, not food—					
18	Castor oil..... gal.	95,875	10,645	106,691	91,651
	\$	201,694	23,601	225,623	80,878
19	Chinawood and rosin oil..... \$	1,958	552,874	609,077	10,948
20	Cocanut, palm and palm kernel oil..... gal.	142,866	904,517	1,103,672	45,772
	\$	221,923	1,157,454	1,477,090	41,996
21	Cotton seed oil, crude..... lb.	—	41,730,070	41,730,070	—
	\$	—	3,944,645	3,944,645	—
22	Essential oils, n.o.p..... lb.	45,806	212,447	285,490	30,723
	\$	162,269	552,349	874,628	70,042
23	Flaxseed or linseed oil, raw or boiled..... lb.	5,375,276	492,521	5,955,926	239,887
	\$	1,310,413	97,400	1,425,452	16,779
24	Other vegetable oils..... \$	24,340	462,170	498,585	18,204
Total oils, vegetable..... \$		1,922,597	6,790,493	9,055,100	238,847

All Countries in quantities and values, by classes entered for consumption, years 1921-1924—con.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
6,065	49,160	51,653	1,635	54,241	94,695	400	96,339	1
10,683	114,810	116,808	2,425	120,362	212,303	959	214,675	2
21	113,386	2,778	366	68,010	1,769	982	145,730	3
275	1,715,929	37,526	2,422	675,647	22,827	4,117	1,009,763	4
70	17,833	800	62	15,506	542	328	15,760	5
164	209,317	12,172	925	103,990	8,349	2,178	95,205	6
34	190,942	78,031	127	158,982	100,740	23	184,834	7
621	2,350,116	1,437,856	2,488	2,085,865	1,889,518	338	2,578,805	8
3,992	111,009	32,355	4,877	119,826	56,817	4,479	154,910	9
17,583	662,379	487,577	23,511	922,594	994,179	16,560	1,373,438	10
23	19,694	503	45	17,290	590	15	30,306	11
113	60,229	2,414	193	38,755	2,428	92	50,182	12
61,435	908,221	787,857	22,559	825,361	711,018	4,753	759,221	13
1,109,546	18,194,027	15,357,411	409,322	15,888,532	14,620,080	88,319	15,076,822	14
162	7,212	256	9	5,438	6	—	33	15
309	32,717	980	53	27,765	52	—	436	16
65,737	1,368,297	902,580	25,045	1,210,413	871,482	10,582	1,291,847	17
1,129,611	23,234,714	17,335,936	438,914	19,743,448	17,537,433	111,641	20,188,247	18
10,359	317,284	23,562	7,114	278,471	11,959	1,493	515,847	19
16,001	799,591	84,584	10,355	635,290	63,393	2,173	808,109	20
347	21,023	283	67	—	910	650	—	21
4,690	385,087	9,817	994	436,198	19,571	6,900	275,091	22
20,691	1,184,678	94,401	11,349	1,071,488	83,040	9,073	1,083,200	23
1,160,985	24,524,202	17,547,145	452,688	20,935,298	17,832,896	121,673	21,486,439	24
289,435	459,229	231,814	277,144	613,729	74,171	319,763	601,320	25
62,922	87,265	31,594	69,781	118,237	16,014	78,632	120,920	26
999,317	1,127,143	120,254	1,329,986	1,573,750	101,237	1,492,384	1,661,644	27
158,856	185,029	22,759	221,931	263,769	15,595	222,738	251,829	28
343,713	492,086	—	527,669	668,153	—	412,558	751,100	29
171,511	238,483	—	260,757	332,183	—	161,672	329,371	30
1,073,431	1,224,632	2	1,278,052	1,412,711	1,630	1,065,734	1,099,838	31
662,948	769,243	2	851,746	946,049	420	630,231	703,098	32
237,304	241,651	—	270,625	271,489	839	311,719	313,389	33
479,480	493,048	—	556,478	558,907	2,487	595,013	599,707	34
155,122	185,327	20,836	203,283	220,247	20,012	233,394	262,610	35
1,690,839	1,958,395	75,191	2,163,976	2,448,392	54,528	1,971,680	2,267,535	36
104,609	106,113	545	38,955	47,222	304	34,460	36,787	37
225,369	229,095	1,063	88,991	103,231	510	73,566	75,298	38
11,471	103,380	107,252	7,193	115,467	94,121	13,227	107,631	39
15,068	96,438	108,548	9,869	119,717	111,513	11,261	123,251	40
273,101	284,049	854	408,216	409,159	7,367	844,669	870,187	41
1,285,171	1,342,390	62,235	1,819,474	1,928,336	46,453	1,650,465	1,886,162	42
954,222	1,008,897	52,352	1,215,860	1,300,405	42,703	1,297,397	1,446,353	43
48,868,340	48,868,340	—	25,838,070	25,838,070	190,243	21,417,968	21,608,211	44
3,283,915	3,283,915	—	2,239,174	2,239,174	16,789	2,115,738	2,132,527	45
274,868	346,047	47,490	318,691	413,665	70,562	246,843	392,097	46
395,128	556,703	79,196	435,780	620,223	86,594	404,636	626,108	47
103,372	416,231	930,294	158,401	1,173,454	1,699,811	103,613	1,848,259	48
10,241	34,543	76,570	19,404	103,595	162,220	14,676	181,791	49
257,230	289,635	22,922	335,855	557,277	90,720	1,458,115	2,504,202	50
5,188,905	5,554,180	340,442	4,664,158	5,349,550	517,906	6,146,492	7,884,419	51

¹ Unrevised figures.

13.—Imports of Canada from the United Kingdom, the United States and in the four fiscal

No.	Principal articles by classes.		1921.			United Kingdom.	
			United Kingdom.	United States.	All Countries.		United Kingdom.
I. Agricultural and Vegetable Products (except chemicals, fibres and wood)—concluded.							
B—OTHER THAN FOOD—Concluded.							
1	Plants, trees, shrubs and vines.....	\$	32,721	450,380	993,045	23,621	
Rubber and its products—							
2	Rubber and gutta-percha, crude caoutchouc.....	lb. \$	4,734,734	7,544,661	22,806,180	820,963	
3	Tires for vehicles, all kinds.....	\$	2,483,804	1,977,845	8,887,196	133,461	
			31,007	2,193,992	2,310,941	16,254	
4	Other manufactures of rubber, etc.....	\$	1,053,770	3,083,341	4,282,823	678,340	
Total rubber and its products.....			\$	3,568,581	7,255,178	15,480,960	828,055
Seeds—							
5	Clover seed.....	lb. \$	70	2,596,382	2,598,380	481,640	
			29	559,276	560,247	100,620	
6	Flax seed.....	bush. \$	397	315,352	536,679	140	
			4,475	1,221,155	2,048,154	876	
7	Garden, field and other seeds.....	\$	238,350	845,553	1,310,077	162,976	
8	Timothy seed.....	lb. \$	—	9,281,201	9,281,201	1,090	
			—	814,023	814,023	547	
Total seeds.....			\$	242,854	3,440,007	4,732,501	265,019
Tobacco—							
9	Tobacco, unmanufactured.....	lb. \$	47,401	19,032,367	20,007,411	17,762	
			38,543	12,108,281	13,083,293	7,640	
10	Tobacco, manufactured—						
	Cigars.....	lb. \$	149	1,150	28,666	167	
			1,443	7,693	205,322	1,315	
11	Cigarettes.....	lb. \$	13,541	10,801	25,611	20,247	
			72,139	27,582	105,309	86,395	
12	Tobacco, cut.....	lb. \$	160,913	279,865	474,000	154,656	
			489,514	346,224	852,746	445,443	
Total tobacco.....			lb. \$	266,098	19,348,484	29,694,167	254,069
				690,890	12,510,056	14,356,294	664,187
Other vegetable products—							
13	Broom corn.....	\$	—	511,222	511,222	—	
14	Drugs, crude, barks, flowers, etc.....	\$	7,981	249,005	315,187	8,663	
15	Hay.....	ton \$	—	50,789	50,789	—	
			—	1,300,892	1,300,892	—	
16	Starch, farina, corn starch, etc.....	lb. \$	42,131	4,402,281	4,766,832	67,508	
			6,141	228,159	251,003	8,674	
17	Turpentine, spirits of.....	gal. \$	5	791,323	791,331	4	
			48	1,131,170	1,131,324	12	
18	All other vegetable products.....	\$	8,167	524,957	553,730	6,844	
Total other vegetable products.....			\$	22,337	3,945,405	4,063,358	24,193
Total Agricultural and Vegetable Products, (other than food).....			\$	29,887,662	39,822,262	87,489,263	21,195,812
Total Agricultural and Vegetable Products.....			\$	38,724,082	119,614,933	259,431,110	27,950,425

All Countries in quantities and values, by classes entered for consumption, years 1921-1924—con.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
343,845	934,242	24,162	411,451	1,064,311	24,149	403,856	1,094,937	1
13,264,904	18,952,465	4,107,146	14,536,757	25,391,333	4,473,218	19,828,526	28,877,244	2
2,261,452	3,437,716	873,654	3,391,920	5,620,621	1,385,714	5,353,629	8,047,394	3
1,157,261	1,188,981	21,493	1,296,592	1,322,050	18,847	932,320	1,013,298	4
1,808,037	2,515,561	787,513	2,150,016	2,974,166	633,278	2,688,630	3,360,281	5
5,226,759	7,142,258	1,682,660	6,838,528	9,916,837	2,037,839	8,974,579	12,420,973	6
3,063,040	3,547,080	335,363	1,912,102	2,248,010	1,709,037	634,293	2,465,137	7
613,458	715,209	87,260	372,139	459,639	324,738	119,930	467,706	8
1,696	284,476	—	7,323	58,949	—	42,801	761,479	9
8,237	445,605	—	15,006	115,773	—	105,571	1,716,580	10
529,534	849,171	95,375	654,059	976,819	159,082	527,762	862,860	11
12,851,393	12,852,483	75	13,469,151	13,469,226	—	10,734,349	10,734,349	12
925,803	926,350	23	975,857	975,880	—	920,500	920,500	13
2,077,032	2,936,335	182,658	2,017,061	2,528,111	483,820	1,673,763	3,967,646	14
19,848,439	20,870,509	14,857	13,063,379	14,548,694	4,879	14,421,145	15,941,339	15
8,108,639	8,867,469	4,944	4,686,642	5,854,405	1,733	5,595,874	7,166,989	16
1,003	15,081	361	1,001	18,915	653	1,141	17,035	17
7,901	125,266	2,763	6,401	133,715	4,980	7,965	119,512	18
5,394	27,136	19,599	15,205	36,127	22,160	8,510	31,880	19
17,432	110,261	78,707	38,109	120,492	95,348	21,542	120,834	20
182,864	359,721	214,346	145,501	393,631	206,193	147,503	389,385	21
243,822	699,262	656,798	168,388	841,407	644,298	168,955	830,658	22
20,061,323	21,360,669	396,226	13,237,322	15,068,407	391,628	14,589,566	16,462,199	23
8,399,873	9,947,903	866,284	4,914,135	7,089,461	901,473	5,805,835	8,404,771	24
327,114	327,114	—	685,819	685,819	—	760,158	764,180	25
128,309	155,579	2,293	135,795	168,643	8,923	144,259	200,054	26
28,998	28,999	—	36,994	37,040	—	13,855	13,870	27
464,458	464,490	—	614,761	616,148	—	219,368	219,940	28
2,866,910	3,256,616	126,496	3,032,625	4,322,479	87,722	2,485,929	3,550,845	29
105,379	130,260	10,675	121,713	170,982	5,216	116,443	151,951	30
977,867	977,871	3	975,807	975,810	343	961,290	962,360	31
757,941	757,953	4	1,210,109	1,210,114	261	1,043,103	1,043,682	32
232,363	257,487	31,407	600,888	681,125	35,136	689,780	812,800	33
2,015,564	2,092,883	44,379	3,369,055	3,532,831	49,536	2,973,111	3,192,607	34
26,325,293	55,319,493	20,763,984	24,920,573	52,968,022	21,902,663	28,114,555	69,797,625	35
84,803,204	172,665,523	26,666,163	73,035,162	161,669,784	28,612,584	81,379,916	186,168,685	36

¹Unrevised figures.

84111—32

13.—Imports of Canada from the United Kingdom, the United States and in the four fiscal

No.	Principal articles by classes.	1921.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
II. Animals and Animal Products (except chemicals and fibres).					
1	Animals, living.....	\$ 397,720	2,672,951	3,071,991	113,124
2	Bone, ivory and shell products.....	\$ 267,021	601,718	1,012,695	62,693
3	Feathers and quills.....	\$ 91,920	340,317	533,552	45,524
Fishery products—					
4	Cod, haddock and pollock, fresh..... lb.	—	897,263	1,111,052	—
 \$	—	36,007	45,222	—
5	Halibut, fresh.....	lb. —	498,550	2,617,947	—
 \$	—	60,315	247,764	—
6	Oysters, shelled, in bulk..... gal.	—	143,576	143,576	—
 \$	—	356,038	356,038	—
7	Salmon, fresh.....	lb. —	738,861	1,572,832	—
 \$	—	91,989	165,717	—
8	Sardines and anchovies..... box	376,608	400,261	3,945,698	289,654
 \$	54,005	39,977	709,164	35,513
9	Cod, haddock, pollock, dried..... lb.	112	18,728	9,186,954	—
 \$	4	2,730	874,001	—
10	Herrings, pickled or salted..... lb.	1,011,438	310,650	9,934,208	1,205,909
 \$	83,426	25,126	427,935	76,499
	Total fishery products.....	\$ 201,329	1,147,557	3,947,608	156,689
Furs, hides, leather and their products—					
11	Fur skins, all kinds, not dressed.....	\$ 319,378	3,606,106	4,624,227	63,597
12	Fur skins, wholly or partly dressed.....	\$ 82,775	457,046	1,123,599	36,869
13	Hatters' furs, not on the skin.....	\$ 49,817	513,205	603,810	32,792
	Total fur skins.....	\$ 509,919	4,689,101	6,586,525	169,295
14	Total hides and skins.....	\$ 492,734	4,436,390	10,652,787	75,402
Leather and manufactures of—					
15	Belting, leather.....	\$ 395,595	73,736	469,331	150,048
16	Calf, kid or goat, lamb and sheep skins, dressed, waxed or glazed.....	\$ 152,188	1,643,495	1,799,308	58,406
17	Glove leathers, tanned or dressed.....	\$ 94,845	1,855,409	2,068,913	10,817
18	Upper leather, including dongola, etc.....	\$ 356,494	508,271	868,298	155,170
19	Boots and shoes, slippers and insoles.....	\$ 358,451	1,803,442	2,175,209	335,761
	Total leather and manufactures of.....	\$ 2,075,621	7,842,171	10,545,004	1,139,069
20	Hair and bristles.....	\$ 111,256	601,676	959,921	65,971
Meats—					
21	Beef, fresh, chilled or frozen..... lb.	—	1,541,431	1,632,862	—
 \$	—	290,125	299,542	—
22	Mutton and lamb, fresh, chilled or frozen lb.	—	2,910,737	7,847,701	—
 \$	—	562,806	1,272,165	—
23	Pork, fresh, chilled or frozen..... lb.	—	22,402,444	22,402,444	3,585
 \$	—	3,862,311	3,862,311	611
24	Bacon and hams, shoulders and sides, cured..... lb.	303	6,817,359	6,823,423	1,200
 \$	111	1,545,380	1,548,084	496
25	Canned meats, poultry and game..... lb.	1,130,112	450,719	2,026,085	817,473
 \$	304,180	134,857	557,811	193,090
26	Pork, dry-salted and in brine..... lb.	—	12,908,149	12,911,847	400
 \$	—	2,172,715	2,173,799	75
27	Soups and extracts.....	\$ 10,242	795,300	818,409	1,630
	Total meats.....	\$ 368,495	10,128,794	11,428,483	303,322

All Countries in quantities and values, by classes entered for consumption, years 1921-1924—con.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
2,375,813	2,504,015	69,065	2,292,022	2,366,865	202,086	2,248,259	2,452,724	1
186,981	305,963	116,090	220,633	431,613	110,118	165,171	326,715	2
219,190	307,511	24,202	181,707	242,305	34,489	195,969	288,117	3
535,784	721,763	—	625,314	1,161,541	—	180,549	409,002	4
20,989	28,660	—	24,276	44,434	—	8,106	13,868	5
465,735	2,550,797	—	956,827	2,644,343	—	459,066	656,629	6
48,712	195,416	—	77,331	225,854	—	49,037	71,749	7
132,106	132,106	—	140,371	140,371	—	114,855	114,855	8
298,653	298,653	—	300,918	300,918	—	301,149	301,149	9
845,080	2,074,790	—	2,056,500	2,787,999	—	142,982	662,273	10
46,843	165,106	—	110,943	174,017	—	13,020	64,554	11
334,637	4,492,554	140,584	133,396	4,509,579	116,891	162,364	5,527,286	12
38,973	471,448	15,100	17,759	427,542	7,996	19,541	467,301	13
37,944	8,111,818	150	41,045	6,482,282	1,120	26,214	4,571,762	14
5,583	470,713	23	5,789	382,976	112	3,403	233,487	15
252,144	10,024,124	1,037,393	663,760	10,120,388	786,638	431,485	3,813,166	16
18,753	330,774	62,510	52,947	298,501	39,165	39,588	156,382	17
1,210,477	3,071,034	133,794	1,085,611	2,813,107	118,999	890,096	2,342,561	18
6,218,494	6,498,585	231,926	5,089,114	5,757,234	604,698	6,079,330	7,507,936	19
538,035	1,240,645	48,518	418,766	1,064,968	50,750	282,331	794,567	20
153,188	245,909	14,445	208,633	302,568	57,150	128,092	341,550	21
7,025,455	8,154,517	322,965	5,806,495	7,245,924	752,690	6,610,664	8,833,559	22
3,405,013	5,898,087	149,770	3,747,703	7,947,410	196,916	3,731,121	7,297,750	23
35,588	185,636	138,332	49,778	188,110	185,297	85,294	271,586	24
1,648,433	1,731,605	82,275	1,035,072	1,120,850	79,484	983,136	1,074,496	25
686,378	711,872	35,211	883,072	926,470	4,573	1,145,375	1,151,890	26
429,408	603,138	364,072	385,287	759,319	391,341	371,993	782,012	27
977,788	1,327,561	410,273	544,912	1,204,904	707,349	778,427	1,529,187	28
5,318,608	6,875,582	1,438,646	4,785,610	6,467,517	1,872,973	5,042,760	7,207,129	29
339,841	532,228	132,289	431,908	607,236	82,649	544,606	653,817	30
72,808	73,512	—	115,064	115,064	—	160,858	165,858	31
20,051	20,085	—	33,943	33,943	—	38,776	39,276	32
2,630,357	3,416,332	—	1,147,018	1,460,130	—	1,376,403	1,561,528	33
420,794	533,005	—	226,384	261,382	—	252,425	271,100	34
28,595,181	28,600,126	—	33,098,670	33,098,701	—	22,039,955	22,040,155	35
4,443,123	4,443,933	—	5,134,045	5,134,061	—	2,764,474	2,764,489	36
6,901,466	6,902,688	2,803	4,661,262	4,664,217	1,193	6,162,996	6,167,951	37
1,242,414	1,242,918	1,242	671,754	673,035	496	754,539	756,337	38
475,227	2,251,556	635,318	292,868	1,644,993	1,154,082	337,609	3,341,733	39
117,953	492,218	117,453	62,033	262,861	175,196	60,643	403,614	40
9,422,215	9,424,560	—	14,605,259	14,606,506	—	12,221,724	12,222,974	41
978,033	978,468	—	1,637,729	1,637,993	—	1,288,418	1,289,015	42
772,914	775,636	7,107	923,973	932,015	1,969	1,122,079	1,125,505	43
8,395,529	9,002,611	210,959	8,985,807	9,347,701	351,136	6,552,904	7,129,969	44

¹Unrevised figures.

13.—Imports of Canada from the United Kingdom, the United States and in the four fiscal

No.	Principal articles by classes.	1921.			United Kingdom.
		United Kingdom.	United States.	All Countries.	
II. Animals and Animal Products (except chemicals and fibres)—concluded.					
Milk products—					
1	Butter..... lb.	112	2,207,077	3,741,628	2,149,704
	\$	49	886,555	1,805,709	621,779
2	Casein..... lb.	224	170,954	1,043,713	—
	\$	125	23,571	129,017	—
3	Cheese..... lb.	7,491	453,882	551,040	26,546
	\$	4,582	206,585	253,647	11,801
Total milk and milk products..... \$		6,352	1,182,180	2,255,561	646,774
Oils, fats, greases and waxes—					
4	Animal oils..... gal.	9,086	175,734	184,720	199
	\$	11,935	267,830	279,765	235
5	Fish, whale and seal oils..... gal.	655	50,844	201,568	524
	\$	2,133	55,845	278,310	632
6	Lard..... lb.	—	11,493,226	11,493,226	56
	\$	—	1,902,768	1,902,768	11
7	Lard compound, etc..... lb.	264,412	2,980,996	3,245,408	310,416
	\$	70,271	397,121	467,392	39,570
8	Grease, rough..... lb.	637,220	13,574,343	14,310,759	18,086
	\$	57,013	1,459,783	1,532,550	1,332
9	Grease and degrass..... lb.	169,554	718,712	906,395	185,188
	\$	14,916	73,048	91,265	7,337
10	Oleomargarine..... lb.	—	4,630,747	4,630,747	6,000
	\$	—	1,206,351	1,206,351	1,399
Total oils, fats, greases and waxes.. \$		185,461	5,536,324	5,986,296	59,715
Miscellaneous animal products—					
11	Eggs..... doz.	1	5,201,417	5,341,936	6
	\$	15	2,292,912	2,344,297	39
12	Gelatine and isinglass..... lb.	402,119	422,030	1,103,800	267,679
	\$	273,945	302,313	756,568	119,922
13	Glue, powdered or sheet and liquid..... \$	150,064	531,917	701,877	102,247
14	Honey and imitations thereof..... lb.	39,144	203,936	683,149	10,947
	\$	5,939	42,640	128,751	1,845
15	Sausage casings, n.o.p..... \$	2,133	234,912	395,401	—
Total Animals and Animal Products (except chemicals and fibres)..... \$		5,148,783	43,911,179	61,722,399	3,092,895
III. Fibres, Textiles and Textile Products.					
Cotton and its products—					
16	Cotton wool or raw cotton, not dyed..... lb.	312	97,903,804	98,631,504	276,971
	\$	156	28,164,088	28,541,989	69,145
17	Crochet and knitting cotton..... lb.	268,985	77,713	352,259	17,892
	\$	783,885	108,251	906,157	47,152
18	Sewing cotton thread in hanks..... lb.	325,102	201,585	526,687	393,905
	\$	731,229	396,759	1,127,988	422,906
19	Sewing thread on spools..... \$	179,970	377,137	571,634	70,729
20	Yarn, cotton, No. 40 and finer..... lb.	4,786,252	948,071	2,730,433	1,125,451
	\$	4,098,071	1,940,410	6,054,981	1,115,769
21	Yarn, cotton, polished or glazed..... lb.	78,405	189,695	268,100	3,873
	\$	159,467	198,702	358,169	4,692

All Countries in quantities and values, by classes entered for consumption, years 1921-1924—con.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
1,363,021	6,078,882	280,982	1,523,381	3,767,573	94,228	165,801	1,558,102	1
458,306	1,853,013	109,613	578,775	1,349,819	42,062	57,564	613,041	2
105,062	217,613	22,091	379,056	643,347	—	90,159	380,123	3
11,697	19,689	3,899	50,012	92,710	—	14,793	53,354	
724,981	877,357	22,519	614,872	916,517	648,403	592,196	1,688,296	
226,390	325,297	10,109	179,543	327,022	136,856	181,931	541,279	
742,767	2,288,273	154,948	850,096	1,844,212	211,017	294,508	1,284,151	
66,457	66,709	5,871	97,255	104,890	1,425	117,039	118,464	4
59,831	60,192	5,766	80,149	87,624	1,407	72,624	74,031	5
34,606	128,490	1,463	58,592	171,670	1,306	53,191	197,970	6
21,022	71,844	1,353	36,921	108,682	1,533	41,343	150,852	7
9,091,109	9,091,245	—	10,551,570	10,551,616	1,434	10,401,725	10,403,159	8
948,068	948,087	—	1,144,120	1,144,141	179	1,193,853	1,194,032	9
2,778,063	3,088,479	198,811	2,316,922	2,516,069	102,780	1,602,559	1,705,339	10
253,410	292,980	22,134	221,582	243,748	12,461	165,958	178,419	11
16,442,645	16,524,853	26,486	13,345,853	13,435,359	46,909	13,754,584	13,943,815	12
1,044,309	1,049,222	1,092	934,799	938,123	1,375	1,136,273	1,147,297	13
809,994	1,004,616	248,157	1,136,585	1,397,969	248,532	878,824	1,132,225	14
57,836	65,531	7,778	56,584	65,038	8,481	61,062	69,752	15
1,339,784	1,345,784	—	1,165,440	1,165,440	—	745,015	745,015	
255,994	257,393	—	190,782	190,782	—	130,605	130,605	
2,805,119	2,927,360	50,709	2,843,829	2,975,925	34,917	2,948,789	3,123,830	
9,377,769	9,637,303	80	8,256,168	8,319,622	250	6,454,313	6,512,812	16
3,162,143	3,239,480	137	2,494,650	2,508,504	686	1,961,477	1,975,707	17
230,224	749,007	365,708	207,526	787,649	485,152	96,180	963,419	18
222,013	461,693	108,404	160,492	348,391	112,060	136,845	354,654	19
158,189	294,792	196,044	126,700	363,054	158,362	102,447	295,540	20
407,306	555,989	1,644	303,944	431,293	6,926	130,062	205,162	21
75,099	92,534	226	40,544	52,406	719	26,174	31,687	22
236,946	313,844	—	275,540	413,010	3,826	286,636	560,562	23
36,110,305	46,645,789	3,143,223	34,812,367	46,736,774	4,288,756	32,357,873	45,026,734	
94,961,142	95,385,978	40,708	125,159,943	125,261,470	178,245	95,155,757	95,596,606	24
16,207,537	16,321,317	2,183	28,318,681	28,324,704	39,715	28,332,723	28,391,278	25
57,746	93,603	51,924	173,976	263,221	30,044	49,779	148,693	26
71,031	145,397	101,083	188,587	383,321	49,306	45,106	211,529	27
210,170	604,146	633,607	265,162	898,769	651,839	321,059	972,964	28
238,249	661,294	606,746	255,847	862,593	603,564	343,057	946,700	29
215,348	315,395	30,211	156,305	188,310	67,663	135,061	205,268	30
1,240,100	2,371,419	1,311,865	1,655,601	2,967,806	1,246,773	1,454,767	2,708,290	31
1,266,305	2,395,075	1,111,889	1,577,215	2,690,034	1,076,607	1,478,015	2,565,639	32
254,869	258,742	29,559	189,329	218,888	31,700	81,433	113,133	33
129,727	134,419	17,912	98,325	116,237	20,927	63,481	84,408	34

¹ Unrevised figures.

13.—Imports of Canada from the United Kingdom, the United States and in the four fiscal

No.	Principal articles by classes.	1921.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
III. Fibres, Textiles and Textile Products—con.					
Cotton and its products—concluded.					
1	Yarn, knitting, hosiery yarn, etc..... lb.	245,034	861,028	1,115,352	126,827
	\$	345,764	684,863	1,078,963	75,770
2	Other cotton thread, n.o.p..... lb.	53,386	170,397	181,288	25,930
	\$	144,142	209,962	371,749	47,809
3	Fabrics, printed, dyed or coloured..... yd.	24,976,558	26,806,036	52,530,220	18,423,924
	\$	12,104,130	8,255,367	21,052,640	4,988,618
4	Grey unbleached cotton fabrics..... yd.	4,882,882	6,547,795	11,500,490	2,065,217
	\$	1,445,736	1,486,882	2,948,302	537,548
5	Plain shirtings, cambrics, voiles, serims, victoria lawns, etc..... yd.	4,826,568	2,143,764	7,191,343	2,125,524
	\$	1,613,687	505,553	2,177,493	429,571
6	White or bleached cotton fabrics..... yd.	4,710,555	9,405,616	14,355,543	2,778,483
	\$	1,682,057	2,382,419	4,167,055	612,301
7	Towelling and towels..... \$	2,403,398	323,263	2,733,961	2,317,814
8	Velvets, velveteens and plush fabrics..... yd.	1,338,958	287,898	1,654,960	525,633
	\$	1,206,731	320,246	1,559,783	377,218
9	Laces and embroidery..... \$	3,117,261	1,017,542	6,185,966	1,639,586
10	Wearing apparel..... \$	1,341,196	3,241,628	4,909,839	557,487
	Total cotton and its products..... \$	37,103,816	58,384,465	99,816,594	14,016,757
Flax, hemp and jute—					
11	Jute or hemp yarn, dyed or coloured..... lb.	2,988,571	1,751,420	4,950,637	1,512,288
	\$	776,800	444,987	1,331,563	145,607
12	Jute cloth or jute canvas, uncoloured..... yd.	9,229,825	3,922,959	61,242,124	5,622,863
	\$	2,500,568	299,054	6,574,298	699,832
13	Other manufactures of..... \$	5,271,936	1,285,630	7,020,258	2,617,323
	Total flax, hemp and jute..... \$	8,549,354	2,029,671	14,926,119	3,462,762
Silk and its products—					
14	Silk, raw, spun or thrown, etc..... lb.	13,628	291,398	318,279	7,950
	\$	101,898	2,409,120	2,615,422	34,754
15	Silk fabrics of which silk is the chief component part..... \$	95,498	591,513	1,428,172	49,758
16	Silk fabrics, n.o.p..... \$	1,866,753	2,370,214	16,832,938	887,163
17	Clothing, silk, n.o.p..... \$	321,231	984,976	1,611,595	163,606
18	Ribbons, all kinds and materials..... \$	635,428	868,270	3,882,360	168,534
	Total silk and its products..... \$	4,272,850	8,690,263	29,729,792	1,823,796
Wool and its products—					
19	Wool, raw, etc..... lb.	2,110,738	6,670,530	9,285,663	5,373,720
	\$	1,677,482	3,071,117	5,088,665	1,591,771
20	Noils and waste and worsted tops..... \$	5,159,112	1,046,932	6,673,288	2,715,052
21	Yarns composed wholly or in part of wool, worsted, the hair of the goat, etc..... lb.	2,755,525	110,615	2,882,166	1,765,523
	\$	6,253,721	158,340	6,454,633	1,982,356
22	Yarns, woollen or worsted, n.o.p..... lb.	303,587	43,713	349,125	241,983
	\$	837,610	64,235	919,535	362,745
23	Carpets and rugs..... \$	2,102,583	270,205	2,597,408	1,106,830
Cloths and dress goods—					
24	Cassimeres, cloths and doeskins..... \$	3,128,107	1,322,393	4,674,100	1,705,781
25	Overcoatings..... yd.	64,925	3,403	69,031	46,341
	\$	199,501	10,376	211,320	77,601
26	Fabrics of wool, or cotton and wool..... yd.	1,789,598	10,826	1,800,424	1,936,077
	\$	1,664,341	16,854	1,681,195	1,191,072
27	Tweeds..... yd.	2,139,658	420,268	2,585,883	1,706,666
	\$	4,513,330	794,727	5,378,147	2,072,431
28	Women's and children's dress goods, etc. sq. yd.	4,757,529	658	4,921,659	3,783,880
	\$	5,418,919	1,584	5,808,510	1,719,411
29	Worsteds and serges, including coatings... yd.	5,238,820	1,103,932	6,453,434	5,297,056
	\$	14,566,067	2,252,381	17,097,360	9,001,126
Wearing apparel—					
30	Clothing, women's and children's..... \$	268,642	1,293,434	1,586,551	234,284
31	Socks and stockings, wool..... \$	2,783,319	80,892	2,864,938	1,329,983
32	Clothing, ready-made..... \$	1,286,794	600,262	1,889,869	894,196
	Total wool and its products..... \$	52,767,847	12,092,437	67,017,640	27,232,945

All Countries in quantities and values, by classes entered for consumption, years 1921-1924—con.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
521,818	650,333	209,234	448,811	666,749	127,935	274,067	399,293	1
204,688	286,005	99,136	224,349	335,572	71,833	168,168	240,253	2
236,416	265,321	61,653	239,092	302,329	67,461	185,024	259,102	2
333,958	386,762	81,901	278,724	362,467	73,557	224,862	302,580	3
32,881,666	52,509,492	20,558,845	27,458,611	58,495,746	32,983,105	17,031,501	51,854,907	3
6,462,262	12,968,748	7,271,227	5,600,134	13,511,968	8,269,977	4,072,037	13,025,648	4
4,842,707	6,908,551	4,524,104	8,952,413	13,487,895	5,399,880	10,533,423	15,937,804	4
572,222	1,109,992	475,864	1,011,971	1,493,445	602,025	1,515,722	2,119,944	5
2,034,300	4,252,362	3,722,059	2,204,332	6,126,912	2,265,279	730,577	3,158,559	5
290,539	757,042	653,794	317,269	1,022,151	396,521	117,151	546,364	6
6,455,917	9,583,472	3,390,570	7,352,507	11,143,215	5,293,028	4,481,760	10,079,893	6
954,400	1,673,863	689,686	1,113,354	1,922,705	978,371	795,939	1,859,915	7
374,454	1,068,445	888,102	393,141	1,285,699	846,731	376,410	1,228,781	7
412,393	984,051	742,909	418,603	1,377,875	884,220	242,277	1,504,807	8
419,054	852,100	462,700	356,470	1,012,980	643,846	205,792	1,148,887	9
864,261	4,071,676	1,850,656	793,666	3,963,788	1,631,489	546,642	3,082,128	9
2,753,194	3,550,770	569,731	2,895,059	3,703,052	592,426	2,134,957	3,096,001	10
35,251,452	52,477,828	17,877,175	47,719,511	65,729,272	19,210,853	44,171,688	66,428,299	
1,030,876	2,638,368	3,559,150	767,823	4,497,210	3,119,205	749,095	4,498,793	11
142,924	326,407	364,206	114,656	513,550	295,309	128,039	532,633	12
21,528,599	68,302,717	10,234,049	9,118,079	80,470,356	9,295,450	6,360,437	78,436,161	12
1,128,535	3,879,462	1,206,234	654,890	5,644,617	1,074,742	437,076	5,289,550	13
1,004,979	3,855,498	3,554,558	1,915,168	5,784,801	3,674,043	3,140,061	7,270,232	13
2,276,438	8,061,367	5,124,998	2,684,714	11,942,968	5,644,454	3,705,176	13,092,420	
364,941	394,029	14,357	386,455	404,634	23,744	351,145	382,245	14
2,501,394	2,655,756	59,200	2,841,208	2,917,034	80,738	2,828,200	2,948,200	15
288,189	753,562	28,043	280,012	636,094	33,470	346,934	607,023	15
2,847,239	13,270,916	966,726	2,774,789	11,807,716	1,133,153	1,545,720	11,349,164	16
1,047,018	1,563,553	161,534	1,099,019	1,578,442	197,275	1,027,632	1,704,852	17
692,359	1,881,919	177,502	512,204	1,575,726	156,074	516,044	1,529,179	18
8,275,412	21,942,338	2,230,392	8,593,063	21,155,876	2,910,081	7,104,797	21,841,422	
2,578,414	12,661,812	8,913,109	3,225,871	18,273,344	9,269,716	5,071,036	19,375,924	19
606,960	3,179,076	2,733,725	773,653	5,078,929	3,404,832	1,790,157	6,860,038	20
210,857	3,357,699	3,638,230	222,684	4,525,784	3,689,065	333,468	4,481,101	20
15,727	1,798,759	3,741,731	123,724	2,939,855	2,686,385	49,463	2,871,063	21
22,726	2,034,893	2,404,195	83,535	3,604,841	3,150,131	35,145	3,359,843	22
27,154	270,377	329,299	31,842	368,860	244,646	12,481	271,642	22
44,588	418,106	463,894	46,350	535,001	346,743	17,498	386,016	23
259,147	1,559,610	1,080,404	191,188	1,525,623	1,250,107	131,714	1,788,258	23
653,527	2,729,954	2,238,244	585,941	3,430,076	2,193,367	496,549	3,338,885	24
2,142	49,049	170,753	1,078	174,060	285,249	3,068	290,009	25
5,367	54,003	277,771	1,347	287,061	414,146	10,553	427,960	26
11,668	1,949,745	2,630,955	6,358	2,640,376	2,115,383	2,733	2,120,139	26
15,136	1,208,153	1,447,793	6,279	1,456,062	1,120,891	4,966	1,127,193	27
191,246	1,925,303	3,479,248	73,536	3,568,098	4,269,602	27,452	4,336,435	28
329,751	2,448,274	3,414,791	115,443	3,551,511	3,893,632	64,836	3,978,384	28
1,600	3,917,642	4,839,382	315	5,132,410	4,444,700	—	5,788,875	29
819	1,834,304	1,938,349	303	2,157,075	1,949,069	—	2,683,499	29
566,657	6,053,591	7,344,721	205,117	7,763,661	6,710,684	153,108	7,522,959	29
1,032,920	10,329,758	11,007,787	356,959	11,630,159	9,304,703	350,888	10,308,252	30
1,310,254	1,569,205	235,087	888,754	1,145,193	259,067	743,316	1,061,050	30
40,436	1,371,731	2,737,424	46,114	2,786,031	2,728,422	29,554	2,767,395	31
364,161	1,267,454	1,200,218	381,300	1,585,609	1,374,526	266,146	1,649,889	32
5,383,267	35,227,691	37,762,683	4,038,172	45,734,381	37,745,096	4,514,716	47,318,763	

¹ Unrevised figures.

13.—Imports of Canada from the United Kingdom, the United States and in the four fiscal

No.	Principal articles by classes.	1921.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
III. Fibres, Textiles and Textile Products—concluded.					
	Vegetable fibres and their products—				
1	Binder twine..... lb.	—	34,641,459	34,755,071	106,660
		—	5,466,395	5,480,897	17,842
2	Manila grass..... cwt.	—	78,039	87,838	—
		—	1,405,797	1,515,962	—
3	Sisal grass..... cwt.	21,884	342,612	365,916	18,032
		\$ 276,562	2,770,810	3,060,571	182,503
Mixed textile products—					
4	Rags and waste..... \$	589,426	1,674,206	2,273,720	85,177
5	Yarn..... lb.	301,348	112,492	512,109	285,778
		\$ 1,179,213	403,782	2,037,142	695,173
6	Oilcloth, all kinds..... \$	1,132,786	1,305,136	2,438,543	490,143
7	Cordage and twines..... \$	1,892,994	1,569,749	3,517,835	961,049
8	Curtains and shams..... \$	384,622	156,456	636,957	225,833
9	Webbing, elastic and non-elastic..... \$	50,045	531,216	589,280	19,940
10	Braids or plaits of chips, palm leaf, etc... \$	147,598	401,831	1,258,935	45,545
11	Hatters' bands (not cords), bindings and hat sweats, etc..... \$	61,393	411,594	719,666	33,130
12	Hats, caps and bonnets, straw, grass or chip..... \$	425,397	693,119	1,171,407	261,651
13	Hats, caps and bonnets, beaver, silk or felt ² \$	463,906	698,851	1,642,720	383,943
14	Hats, caps and bonnets, n.o.p..... \$	318,610	860,159	1,242,302	160,742
15	Corsets, all kinds..... \$	16,587	286,045	303,232	2,994
16	Gloves and mitts..... \$	596,904	103,360	789,380	193,827
17	Knitted goods of every description..... \$	386,438	429,848	861,671	189,782
18	Dressing, antiseptic surgical, etc..... \$	120,715	339,024	461,181	85,844
Total Fibres, Textiles and Textile Products..... \$		111,348,051	101,738,045	243,608,342	50,892,567
IV. Wood, Wood Products and Paper.					
Books and printed matter—					
19	Books, printed, periodicals and pamphlets \$	695,612	2,315,693	3,205,995	582,674
20	Newspapers and quarterly, monthly and semi-monthly magazines..... \$	43,705	2,625,625	2,672,585	47,911
21	Photographs, chromos, etc..... \$	154,837	1,081,202	1,257,599	124,944
22	Advertising pamphlets, etc..... \$	68,968	1,735,818	1,807,330	64,548
23	Bank notes, bonds, bills of exchange..... \$	22,031	646,302	674,950	23,816
24	Labels for cigar boxes, fruits, etc..... \$	72,872	621,108	702,029	41,571
25	Bibles, prayer books, etc..... \$	234,786	189,690	656,074	252,933
Total books and printed matter... \$		1,794,318	11,104,846	13,566,535	1,727,336
Paper and manufactures of—					
26	Cardboard, millboard, strawboard, news-board, etc..... \$	39,687	1,655,821	1,697,548	15,445
27	Book and printing paper, not coated..... lb.	366,504	6,953,832	7,321,606	172,979
		\$ 75,770	870,344	946,488	34,234
28	Wrapping paper, all kinds..... lb.	208,975	6,501,440	6,784,724	149,460
		\$ 31,115	717,550	759,320	17,712
29	Hangings or wall paper..... roll	72,573	1,783,040	1,869,849	81,335
		\$ 45,350	458,010	512,071	36,678
30	Boxes or containers, printed or not..... \$	32,871	1,405,262	1,473,436	19,507
Total paper and manufactures (except books and printed matter). \$		851,508	12,248,746	13,645,321	599,089
Wood, unmanufactured or partially manufactured—					
31	Fence posts and railroad ties..... \$	—	1,749,192	1,749,192	—
32	Cherry, chestnut and hickory..... M ft.	—	10,024	10,024	—
		\$ —	1,136,901	1,136,901	—
33	Mahogany..... ft.	1,230	2,146,590	2,258,002	31,399
		638	548,325	561,371	6,743
34	Oak..... M ft.	—	37,327	37,418	—
		\$ —	4,506,207	4,517,795	—
35	Pitch pine..... M ft.	—	37,468	37,468	—
		\$ —	1,773,164	1,773,164	—

² Felt only in 1922, 1923, 1924.

All Countries in quantities and values, by classes entered for consumption, years 1921-1924—con.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
46,651,936	46,758,792	3,062,720	46,927,667	49,990,387	2,213,480	52,159,463	54,427,211	1
7,351,011	7,368,892	379,453	4,820,569	5,200,022	252,028	5,541,454	5,799,586	
21,010	42,249	—	37,598	52,089	813	47,230	50,630	2
185,094	329,545	—	281,496	372,644	8,342	442,465	461,819	
126,934	145,272	29,949	134,780	164,729	25,347	190,448	218,092	3
854,743	1,038,494	226,975	897,529	1,124,504	211,837	1,356,466	1,588,153	
624,136	724,702	212,928	810,206	1,047,283	252,542	909,930	1,171,658	4
186,122	570,450	469,201	178,446	933,791	93,559	34,306	164,191	5
435,251	1,347,871	1,159,837	427,595	2,248,997	212,334	59,785	344,707	
764,999	1,258,679	558,563	878,902	1,439,699	654,608	1,106,859	1,766,812	6
856,917	1,872,032	1,223,150	1,212,607	2,476,661	1,048,480	1,118,582	2,239,201	7
120,465	406,233	247,671	100,861	406,389	232,023	144,698	459,034	8
361,524	381,491	17,228	337,862	355,109	3,015	82,561	109,749	9
283,288	560,070	46,192	229,189	479,607	17,196	264,330	512,002	10
356,139	537,585	28,071	395,943	497,765	2,156	25,907	32,766	11
626,749	948,729	335,032	519,510	883,733	306,224	563,813	915,873	12
563,618	1,054,584	377,362	614,143	1,231,864	363,340	362,898	982,951	13
767,249	969,587	204,137	763,264	1,000,630	112,072	667,672	833,454	14
272,742	276,412	5,612	228,825	235,252	9,848	198,546	211,046	15
113,983	437,280	534,731	180,360	990,780	710,150	86,012	1,296,149	16
782,974	993,050	343,642	680,803	1,076,135	512,312	318,385	979,920	17
246,881	336,761	109,292	228,353	341,690	231,564	247,106	484,463	18
67,619,469	139,997,137	69,339,824	77,283,472	170,146,958	72,298,562	71,769,236	173,795,660	
1,964,810	2,692,731	522,056	1,841,154	2,503,514	567,139	1,992,057	2,679,238	19
2,557,432	2,607,312	25,767	1,950,556	1,978,620	11,357	2,718,393	2,731,806	20
868,821	1,022,184	115,137	685,375	818,326	96,594	765,825	897,173	21
1,731,942	1,514,055	84,318	1,476,814	1,581,990	163,743	1,645,393	1,821,473	22
471,616	501,769	24,331	458,771	487,294	21,540	401,709	428,476	23
463,795	508,788	41,787	415,430	461,898	49,146	338,973	407,220	24
183,767	660,184	200,183	169,745	454,239	170,665	148,995	400,784	25
9,872,506	12,161,352	1,508,489	8,576,737	10,501,511	1,689,104	9,698,934	11,681,325	
825,883	842,193	16,583	762,488	780,183	22,359	741,218	766,859	26
4,924,509	5,145,500	1,288,386	5,220,953	6,548,498	1,340,563	3,791,466	5,241,182	27
416,342	455,530	97,086	401,017	500,622	115,248	381,227	504,636	28
3,902,140	4,063,613	369,359	8,011,233	9,005,749	423,760	7,476,227	9,939,698	29
246,189	266,063	36,543	477,281	549,239	45,484	491,078	628,447	30
1,096,429	1,193,260	66,687	1,834,402	1,934,760	129,636	2,519,263	2,678,665	31
243,806	289,234	34,257	315,961	357,881	46,895	429,404	491,349	32
744,121	804,464	17,040	622,892	647,706	14,246	960,069	988,930	33
6,823,876	7,949,428	856,896	7,177,981	8,481,676	970,520	7,705,418	9,384,774	
1,835,196	1,835,196	—	625,145	627,292	—	1,092,814	1,100,148	34
6,095	6,095	—	10,777	10,777	—	8,800	8,800	35
481,568	481,568	—	922,176	922,176	—	729,583	729,583	36
675,989	707,988	10,860	831,455	860,381	19,258	1,861,454	1,893,545	37
128,975	135,718	2,192	120,254	124,255	2,941	288,229	292,550	38
20,552	20,599	—	34,406	34,441	—	36,965	36,993	39
1,541,668	1,548,494	7	2,286,744	2,288,968	—	2,678,983	2,683,431	40
27,895	27,895	—	26,788	26,788	—	42,711	42,718	41
724,657	724,657	—	1,048,129	1,048,129	—	1,665,873	1,665,970	42

¹Unrevised figures.

13.—Imports of Canada from the United Kingdom, the United States and in the four fiscal

No.	Principal articles by classes.	1921.			United Kingdom.
		United Kingdom.	United States.	All Countries.	
IV. Wood, Wood Products and Paper—concluded.					
	Wood, unmanufactured or partially manufactured—concluded.				
1	Lumber, rough sawn or dressed on one side only..... M ft.	1	49,320	49,510	—
 \$	114	3,107,519	3,119,994	152
2	Veneers of oak, rosewood, mahogany, etc..... \$	17	649,845	649,862	—
	Total wood, unmanufactured or partially manufactured..... \$	69,129	18,560,838	18,707,787	24,669
3	Wood, manufactured—Barrels, empty..... No.	1,425	202,496	205,077	117
 \$	1,871	323,370	326,970	257
4	Staves of oak, sawn, split or cut..... M	—	6,369	6,369	—
 \$	—	459,106	459,106	—
5	Corks..... lb.	43,062	97,394	526,018	33,884
 \$	45,877	79,138	330,719	33,581
6	Wood pulp—Soda pulp..... lb.	—	1,415,561	1,415,561	—
 \$	—	94,898	94,898	—
7	Unbleached sulphite pulp..... lb.	—	28,986,667	28,986,667	—
 \$	—	1,301,266	1,301,266	—
8	Bleached sulphite pulp..... lb.	—	—	—	—
 \$	—	—	—	—
9	Wood pulp, mechanically or chemically prepared..... lb.	2,145	19,764,137	19,766,282	2,800
 \$	652	1,270,841	1,271,493	842
10	Fibre, kartavert, indurated fibre, etc..... \$	2,299	478,073	480,389	1,063
11	Furniture, house, office, cabinet, etc..... \$	112,064	1,433,518	1,686,159	101,537
	Total Wood, Wood Products and Paper..... \$	3,144,574	52,359,847	57,449,384	2,657,542
V. Iron and its Products.					
12	Iron ore..... ton	—	1,305,512	1,950,291	—
 \$	—	5,038,900	5,595,038	—
13	Pigs, ingots, blooms and billets..... \$	755,688	3,804,163	4,638,987	76,585
14	Scrap iron or steel..... \$	2,000	2,405,913	2,419,194	193
15	Castings and forgings, n.o.p..... \$	640,288	6,149,501	6,790,520	661,214
Rolling mill products—					
16	Rolled iron or steel and cast steel in bars, bands, hoops, etc..... cwt.	151,758	1,977,212	2,138,578	46,371
 \$	2,223,571	11,587,594	13,876,312	453,182
17	Rolled iron or steel hoop, scroll or strip, No. 14 gauge and thinner..... cwt.	8,372	212,718	221,090	—
 \$	75,401	1,158,614	1,234,015	—
18	Rolled iron or steel hoop, band, scroll or strip, 14 gauge and thinner, galvanized. cwt.	6,773	216,998	223,948	1,999
 \$	74,496	1,124,797	1,206,659	7,350
19	Steel, rolled, for saws and straw cutters, not tempered or ground..... cwt.	269	30,874	31,143	23
 \$	24,475	483,477	507,952	844
20	Bar iron or steel, rolled..... cwt.	690	1,669,828	1,670,518	5,510
 \$	8,041	4,690,905	4,698,946	14,760
21	Iron and steel railway bars or rails..... ton	—	20,224	20,224	13
 \$	—	980,191	980,191	560
22	Shafting, round, steel, in bars, etc..... cwt.	53	79,367	79,420	—
 \$	2,170	405,575	407,745	—
Plates and sheets—					
23	Boiler plate of iron or steel..... cwt.	—	260,900	260,900	—
 \$	—	1,040,554	1,040,554	—
24	Canada plates, Russia iron, terne plate... cwt.	9,289	188,167	197,456	18,982
 \$	89,449	1,153,659	1,243,108	84,476
25	Iron sheets and plates, tin..... cwt.	21,584	1,164,192	1,185,776	267,837
 \$	297,317	8,605,139	8,902,463	1,288,213
26	Rolled iron or steel plates not less than 30 inches in width..... cwt.	—	877,367	877,478	188
 \$	—	2,603,421	2,603,921	382

All Countries in quantities and values, by classes entered for consumption, years 1921-1924—con.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
43,569	48,787	—	56,825	57,125	16	50,104	50,365	1
1,631,840	1,640,604	57	2,027,931	2,038,880	1,117	2,077,705	2,090,251	
264,834	264,834	—	225,427	225,427	506	372,519	373,025	2
8,827,011	8,931,103	14,369	9,697,568	9,758,613	21,930	11,950,285	12,163,413	
126,223	127,016	790	92,883	94,989	2,602	129,313	135,142	3
153,302	155,150	1,002	148,919	152,488	10,328	181,507	201,878	
2,814	2,814	—	3,714	3,714	—	5,907	5,907	4
184,283	184,283	—	207,101	207,101	—	371,426	371,426	
45,445	251,914	8,662	115,394	262,673	24,556	109,312	364,177	5
43,730	185,270	6,481	85,455	156,340	25,693	78,454	211,538	
813,791	813,791	—	3,333,780	3,333,780	—	2,558,439	2,558,439	6
35,156	35,156	—	123,770	123,770	—	101,052	101,052	
27,034,427	27,034,427	—	31,007,353	31,007,353	—	28,688,714	28,800,714	7
1,009,905	1,009,905	—	830,092	830,092	—	786,271	789,509	
149,866	149,866	—	356,259	356,259	—	400,472	400,472	8
6,018	6,018	—	14,495	14,495	—	17,132	17,132	
466,135	468,935	5,964	240,210	246,394	—	2,247,422	7,252,931	9
19,437	20,279	978	11,984	12,987	—	37,009	127,740	
299,169	300,450	2,011	355,317	357,521	2,155	358,873	359,426	10
947,872	1,219,689	144,297	1,039,634	1,326,114	158,719	946,400	1,234,465	11
31,423,889	35,791,487	2,708,338	31,841,398	35,845,544	3,061,976	36,068,586	40,976,833	
509,185	656,902	88	701,493	1,044,999	314	1,296,253	1,807,223	12
1,721,438	1,936,247	2,889	2,059,109	2,588,536	4,851	4,360,298	5,437,004	
819,981	932,370	949,467	1,284,720	2,277,435	855,502	1,492,492	2,462,219	13
338,042	343,380	—	236,517	242,632	2,000	689,121	729,301	14
3,124,351	3,787,460	258,102	3,046,274	3,304,595	500,312	4,346,808	4,939,282	15
355,164	405,251	65,179	373,813	445,723	196,651	879,047	1,056,788	16
2,028,209	2,523,985	546,603	2,134,392	2,832,298	1,205,637	4,448,801	5,758,894	
85,824	85,824	1,185	246,120	247,305	—	220,995	220,995	17
269,992	289,992	2,963	821,472	824,435	—	841,738	841,738	
61,815	63,814	23,921	197,592	222,588	16,227	149,830	166,057	18
279,095	286,445	80,316	749,631	864,550	64,570	685,834	750,404	
5,428	5,451	29	18,137	18,157	1,154	22,714	23,882	19
78,963	79,807	1,203	227,660	228,863	13,733	324,123	338,054	
647,161	667,100	89,566	1,541,982	1,648,080	124,157	1,161,651	1,304,255	20
1,483,834	1,531,563	207,789	3,462,780	3,704,864	319,997	3,182,535	3,534,507	
16,828	16,851	540	30,910	31,674	580	57,084	57,867	21
858,608	859,613	15,658	1,149,411	1,172,171	17,451	2,093,164	2,116,057	
17,144	17,144	304	56,899	57,203	8,154	82,233	90,387	22
69,744	69,744	949	173,916	174,865	25,774	307,514	333,288	
60,433	60,433	5,665	138,834	144,499	1,313	168,181	171,377	23
154,114	154,114	13,263	346,145	359,408	3,807	512,321	520,686	
135,194	154,176	119,854	187,531	307,415	111,427	170,328	281,890	24
577,644	662,120	470,486	765,887	1,236,373	445,709	817,331	1,263,615	
474,376	742,213	700,536	367,751	1,068,337	591,480	704,910	1,296,390	25
2,727,087	4,015,300	3,051,884	1,748,242	4,800,126	3,238,525	3,860,437	7,098,962	
249,802	249,900	6,561	588,174	595,824	64,451	739,093	818,929	26
532,150	532,532	12,512	1,148,905	1,163,292	132,863	1,970,083	2,134,690	

¹Unrevised figures.

13.—Imports of Canada from the United Kingdom, the United States and in the four fiscal

No.	Principal articles by classes.	1921.			United Kingdom.
		United Kingdom.	United States.	All Countries.	
V. Iron and its Products—con.					
Plates and sheets—concluded.					
1	Rolled iron or steel plates or sheets, sheared or unsheared, etc..... cwt.	143	383,500	383,643	1,307
	\$	1,452	1,178,474	1,179,926	5,895
2	Rolled iron or steel sheets, polished or not..... cwt.	60,634	986,338	1,047,069	13,599
	\$	628,478	5,866,282	6,497,410	65,379
3	Sheets, flat, of galvanized iron or steel.. cwt.	89,060	419,673	508,733	19,113
	\$	982,085	2,584,206	3,566,291	106,809
4	Skelp iron or steel, sheared or rolled in grooves..... cwt.	—	2,058,050	2,058,050	—
	\$	—	6,052,793	6,052,793	—
5	Rolled round wire rods of iron or steel... cwt.	—	562,009	562,009	1,154
	\$	—	1,630,836	1,630,836	2,231
6	Rolled iron or steel angles, tees, beams, etc..... cwt.	1,308	998,022	999,330	506
	\$	11,846	2,871,516	2,883,362	2,122
7	Rolled iron or steel angles, beams, channels and other rolled shapes, etc..... cwt.	1,721	2,038,791	2,040,512	—
	\$	4,411	5,962,361	5,966,772	—
8	Steel plate..... cwt.	—	525,810	525,810	—
	\$	—	1,532,521	1,532,521	—
	Total rolling mill products..... \$	4,474,964	65,505,709	70,056,650	2,034,490
9	Tubes, pipe and fittings..... \$	291,770	5,928,346	6,226,128	105,474
Wire—					
10	Barbed fence wire of iron or steel..... cwt.	—	418,554	418,554	—
	\$	—	1,934,159	1,934,159	—
11	Wire, curved or not, galvanized iron or steel, Nos. 9, 12, 13 gauge..... cwt.	245	366,162	366,407	1
	\$	2,921	1,424,500	1,427,421	13
12	Wire rope, stranded or twisted wire..... \$	1,000,585	332,996	1,333,712	362,760
13	Wire, steel, valued at not less than 2½ c. per lb. for the manufacture of rope..... cwt.	54,386	52,337	106,723	19,082
	\$	757,257	502,413	1,259,670	182,204
	Total wire..... \$	2,021,886	5,981,823	8,018,285	668,122
14	Chains, all kinds..... \$	308,571	994,189	1,304,654	99,307
Engines and boilers, n.o.p.—					
15	Boilers, steam, and parts of..... \$	346,824	232,461	579,285	59,262
16	Boilers, n.o.p., and parts of..... \$	21,250	260,973	282,223	6,560
17	Engines, automobile..... No.	—	20,087	20,087	1
	\$	1,028	5,387,416	5,388,444	2,087
18	Engines, internal combustion..... No.	297	14,330	14,627	162
	\$	82,673	2,175,077	2,257,870	70,161
19	Engines, steam..... No.	13	144	157	5
	\$	61,214	443,968	505,182	28,695
20	Engine parts and accessories, n.o.p..... \$	—	—	—	—
21	Locomotives for railways..... No.	—	52	52	1
	\$	—	542,643	542,643	4,816
22	Locomotives for railways, electric..... No.	—	11	11	—
	\$	—	53,177	53,177	—
	Total engines and boilers, n.o.p.... \$	514,381	9,202,926	9,717,427	173,385
Farm implements and machinery—					
23	Cream separators and steel bowls for.... \$	101,557	721,652	992,404	25,699
24	Harvesters, self-binding..... No.	—	5,485	5,485	—
	\$	—	1,001,575	1,001,575	—
25	Mowing machines..... No.	—	1,271	1,271	—
	\$	—	79,275	79,275	—
26	Potato diggers..... No.	—	1,298	1,298	—
	\$	—	101,267	101,267	—
27	Cultivators and weeders and parts of.... \$	—	177,170	177,170	112
28	Drills, seed..... No.	2	3,102	3,106	—
	\$	150	211,345	211,580	—

All Countries in quantities and values, by classes entered for consumption, years 1921-1924—con.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
118,408	119,715	17,895	389,205	407,819	85,080	417,409	509,865	1
288,304	294,199	40,326	949,904	991,434	205,954	1,242,074	1,462,840	
447,301	462,868	138,286	926,078	1,064,416	128,812	765,371	894,583	2
2,008,662	2,081,857	504,805	3,752,046	4,256,952	469,202	3,742,319	4,213,300	
254,253	273,366	296,089	422,539	718,070	137,565	455,354	592,919	3
1,289,743	1,396,552	1,214,135	1,848,082	3,062,444	668,101	2,235,371	2,903,472	
1,011,685	1,011,685	2,150	1,839,061	1,841,211	43,857	1,915,285	1,959,142	4
1,990,511	1,990,511	3,011	3,439,559	3,442,570	113,064	4,672,309	4,785,373	
326,565	346,886	5,621	345,944	405,716	526	291,265	292,342	5
681,914	726,563	9,542	724,866	828,899	2,305	708,875	712,742	
213,857	214,450	9,580	591,351	602,659	103,612	982,978	1,103,219	6
487,914	490,199	18,802	1,242,904	1,265,709	224,530	2,602,729	2,858,907	
637,877	637,877	2,142	1,721,165	1,727,915	114,441	1,413,910	1,538,681	7
1,389,573	1,389,573	4,716	3,519,391	3,531,078	224,774	3,709,731	3,953,906	
89,527	89,527	—	261,425	261,425	101,354	399,729	501,083	8
189,212	189,212	—	508,561	508,561	221,400	1,019,350	1,240,750	
17,959,001	20,120,566	6,271,886	29,965,515	36,573,581	7,879,000	41,070,758	49,215,218	
2,028,147	2,166,020	182,898	2,450,622	2,656,931	600,344	3,352,011	4,063,860	9
166,033	166,133	112	105,319	105,436	—	133,466	133,466	10
699,744	700,094	506	376,355	376,885	—	568,715	568,715	
195,152	195,153	—	210,053	210,053	—	206,117	206,117	11
654,483	654,496	—	599,135	599,135	—	664,645	664,645	
75,527	440,004	493,047	116,797	609,960	800,538	113,382	921,796	12
6,230	25,312	36,345	12,392	49,111	87,253	1,592	88,845	13
60,132	242,336	257,707	95,252	355,185	664,901	16,643	681,544	
2,202,577	2,889,392	997,592	2,071,585	3,078,932	1,665,345	2,390,502	4,066,368	
361,648	464,288	143,211	398,200	541,539	235,746	466,513	704,810	14
65,383	124,645	72,354	194,757	267,111	69,636	131,903	201,539	15
152,262	158,822	1,397	126,756	128,153	43,913	161,473	205,446	16
12,176	12,177	15	26,210	26,225	8	33,736	33,744	17
3,117,839	3,119,926	12,370	4,141,556	4,153,926	6,213	5,050,089	5,056,302	
4,722	4,885	161	6,425	6,587	115	6,530	6,649	18
899,338	970,402	33,089	834,536	871,371	54,057	983,105	1,043,418	
68	73	10	116	126	13	120	137	19
183,043	211,738	65,472	252,865	318,337	110,344	131,360	259,878	
—	—	68,728	960,148	1,028,886	24,829	1,218,473	1,245,237	20
21	22	—	14	14	—	91	91	21
110,320	115,136	—	99,627	99,627	—	565,117	565,117	
13	13	—	8	8	—	4	4	22
53,654	53,654	—	50,924	50,924	—	27,128	27,128	
4,663,049	4,837,337	253,410	6,732,447	6,989,613	308,992	8,353,483	8,688,900	
201,032	325,755	110	208,620	237,949	11,107	434,838	524,230	23
1,316	1,316	—	1,606	1,606	—	3,332	3,332	24
319,807	319,807	—	256,916	256,916	—	539,924	539,924	
522	522	—	410	410	—	587	587	25
36,143	36,143	—	23,123	23,123	—	34,061	34,061	
259	259	1	862	863	7	635	643	26
23,618	23,618	95	64,663	64,758	838	55,287	56,155	
62,583	62,695	16	62,790	62,806	4	88,753	88,757	27
790	792	10	1,046	1,056	1	1,623	1,624	28
38,041	38,079	46	39,233	39,279	88	57,551	57,639	

¹Unrevised figures.

13.—Imports of Canada from the United Kingdom, the United States and in the four fiscal

No.	Principal articles by classes.	1921.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
V. Iron and its Products—con.					
Farm implements and machinery—concluded.					
1	Harrows and parts of..... \$	216	382,554	382,770	168
2	Ploughs and parts of..... \$	12	2,526,472	2,526,503	41
3	Threshing machine separators..... No.	—	1,767	1,767	—
4	Threshing machine separators, parts of... \$	135	1,534,572	1,534,572	—
5	Portable engines with boilers in combination and traction engines for farm purposes..... No.	—	1,003	1,003	—
 \$	6,276	2,440,045	2,446,321	3,484
6	Traction engines, gas or gasoline, for farm purposes, costing not more than \$1,400.. No.	—	11,402	11,402	3
 \$	—	10,160,949	10,160,949	4,016
Total farm implements and machinery..... \$		141,632	24,134,783	24,458,834	68,832
7	Firearms, total..... \$	43,694	638,511	726,073	73,819
Hardware and Cutlery.					
Cutlery—					
8	Knives and forks of steel, plated or not... \$	417,256	301,742	723,916	284,979
9	Pen knives, jack-knives and pocket-knives \$	563,927	104,297	704,225	380,492
10	All other cutlery..... \$	449,824	528,458	1,041,157	236,980
Hardware—					
11	Builders', cabinet makers', etc..... \$	79,203	703,950	784,815	51,323
12	Locks of all kinds..... \$	22,511	676,418	702,142	10,731
13	Butts and hinges, n.o.p..... \$	1,564	164,078	165,642	3,113
14	Nails, spikes and tacks..... \$	2,769	300,337	303,578	417
15	Needles and pins..... \$	342,189	287,730	636,105	216,212
16	Nuts, rivets and bolts, etc..... \$	8,127	569,994	578,170	4,222
Total hardware and cutlery..... \$		1,930,920	3,714,993	5,781,008	1,205,330
Machinery (except agricultural).					
Household machinery—					
17	Carpet sweepers, hand vacuum and electric vacuum cleaners..... No.	4	8,161	8,165	9
 \$	36	154,725	154,761	174
18	Sewing machines..... No.	2,275	8,806	11,081	1,076
 \$	83,890	377,559	461,449	43,123
19	Sewing machines, parts of..... \$	62,841	613,128	675,960	82,723
20	Washing machines, domestic..... No.	1	9,469	9,470	—
 \$	21	615,465	615,486	—
21	Clothes wringers and parts..... \$	34	65,167	65,201	—
Mining machinery—					
22	Mining, smelting and reducing machinery, etc..... \$	26,873	830,341	862,934	14,698
23	Ore crushers and rock crushers, stamp mills, etc..... \$	59,400	729,420	788,820	52,324
Office or business machinery—					
24	Adding and calculating machines..... No.	—	2,606	2,622	—
 \$	—	953,253	955,373	—
25	Cash registers and parts of..... \$	—	322,007	322,007	—
26	Typewriting machines..... No.	58	14,792	14,853	3
 \$	3,046	998,481	1,001,587	214
Printing and bookbinding machinery—					
27	Machines specially designed for ruling, etc..... \$	8,384	777,007	791,029	29,362
28	Newspaper printing presses..... No.	—	94	94	—
 \$	—	648,377	648,377	—
29	Printing presses and lithographing presses \$	7,172	982,937	991,128	46,252
30	Typecasting and typesetting machines, etc..... \$	248	1,244,256	1,244,504	2,237
Other machinery, n.o.p.—					
31	Air-compressing machines..... \$	41,960	263,219	305,179	23,319
32	Coal-handling machines..... \$	1,759	166,818	168,577	29,433
33	Cranes and derricks..... No.	4	104	108	1
 \$	31,560	848,157	879,717	4,607

All Countries in quantities and values, by classes entered for consumption, years 1921-1924—con.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
71,010	71,178	380	92,890	93,270	35	140,423	140,458	1
554,705	554,846	75	708,694	708,769	193	849,210	849,403	2
1,934	1,934	—	1,932	1,932	2	3,074	3,076	3
2,187,872	2,187,872	—	1,646,704	1,646,704	2,425	2,778,743	2,781,168	4
550,837	550,337	—	611,452	611,452	—	715,630	715,630	5
109	109	—	82	82	—	151	151	6
522,175	525,659	—	129,630	129,630	—	282,343	282,343	7
1,768	1,771	—	5,426	5,426	50	5,035	5,085	8
1,340,016	1,344,032	—	2,857,428	2,857,428	31,030	3,338,194	3,369,224	9
7,546,472	7,718,032	31,041	8,352,071	8,423,995	104,519	11,570,014	11,766,285	10
215,888	313,886	73,973	373,561	469,831	141,811	364,123	633,066	11
118,023	411,460	278,270	127,565	420,628	291,390	99,826	440,108	12
28,485	463,798	189,607	30,096	292,936	177,474	36,889	444,059	13
321,523	632,689	179,106	253,122	537,851	217,926	256,521	697,389	14
391,560	442,919	54,667	510,379	566,561	97,874	481,140	581,065	15
320,823	333,293	19,763	344,886	369,547	24,204	361,003	388,245	16
88,341	91,544	2,457	139,925	143,456	7,643	152,957	164,273	17
232,197	233,659	2,029	109,853	115,782	2,870	120,809	127,738	18
208,303	427,354	213,340	214,676	434,843	222,532	189,141	419,379	19
317,496	321,873	4,403	439,704	444,168	12,330	483,262	495,678	20
2,054,671	3,425,850	963,592	2,216,014	3,406,483	1,063,446	2,244,812	3,848,055	21
8,715	8,724	59	9,028	9,142	210	10,257	10,471	22
176,960	177,134	758	121,455	122,910	1,261	112,060	113,456	23
4,258	5,334	859	4,724	5,584	648	4,942	5,601	24
265,178	308,307	34,442	248,043	282,505	22,663	191,794	215,189	25
407,083	489,806	10,131	141,695	151,861	68,502	425,231	493,733	26
4,860	4,860	3	6,716	6,719	52	9,126	9,181	27
349,207	349,207	249	391,014	391,263	4,585	560,859	565,723	28
10,573	10,573	—	17,729	17,729	—	20,958	20,958	29
741,217	756,095	37,008	758,955	795,963	36,834	848,881	885,715	30
557,008	609,332	67,648	756,332	823,980	105,208	897,193	1,003,074	31
1,603	1,607	1	2,062	2,068	—	3,308	3,312	32
298,554	300,137	640	397,842	400,331	—	606,066	607,296	33
227,431	227,431	45	248,724	248,769	—	282,900	282,900	34
10,421	10,431	65	12,345	12,410	13	12,205	12,219	35
630,986	631,356	4,456	728,859	733,315	856	661,363	662,234	36
268,627	302,248	27,853	529,985	559,372	13,238	443,996	459,451	37
36	36	2	56	59	5	35	40	38
318,055	318,055	6,955	519,026	530,681	25,540	200,297	225,837	39
644,957	694,124	16,390	655,050	675,091	23,233	712,037	753,058	40
886,371	888,715	728	1,037,783	1,038,511	816	795,234	796,050	41
152,207	175,526	18,715	239,647	258,362	9,360	375,435	386,209	42
137,441	166,874	286	114,503	114,789	14,744	91,217	105,961	43
68	69	—	86	86	23	124	147	44
427,905	432,512	—	476,369	476,369	100,794	511,194	611,988	45

¹ Unrevised figures.

13.—Imports of Canada from the United Kingdom, the United States and in the four fiscal

No.	Principal articles by classes.	1921.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
V. Iron and its Products—concluded.					
Machinery (except agricultural)—concluded.					
Other machinery, n.o.p.—concluded.					
1	Cyclometers, pedometers, etc.....	\$ 152	178,290	178,442	66
2	Fire-extinguishing machines, etc.....	\$ —	151,098	151,098	—
3	Lathes, power.....	\$ 22,763	542,246	565,337	10,577
4	Machine drills.....	\$ 187,915	744,169	932,084	26,552
5	Metal-working machinery, n.o.p.....	\$ —	—	—	27,416
6	Pumps, power, and parts of.....	No. 143	6,134	6,280	61
		\$ 52,586	1,201,506	1,255,244	73,415
7	Paper and pulp machinery.....	\$ 690,110	1,711,795	2,487,993	360,190
8	Rolling-mill machinery.....	\$ 548	646,087	646,635	—
9	Saw-mill machines.....	\$ 1,426	320,543	321,969	—
10	Textile machinery of a class or kind not made in Canada, and parts of.....	\$ —	—	—	—
11	Other machinery composed wholly or in part of iron or steel, and parts of.....	\$ 1,245,989	4,932,506	6,199,562	675,923
		\$ 1,066,066	19,704,650	20,977,346	630,329
	Total machinery (except agricultural)	\$ 3,597,287	41,952,851	45,881,205	2,110,046
12	Springs.....	\$ 2,329	557,121	559,454	3,210
13	Stamped and coated products.....	\$ 188,515	1,715,964	1,909,107	77,705
14	Tools and hand implements.....	\$ 199,366	2,315,480	2,562,029	93,270
Vehicles, chiefly of iron—					
15	Automobiles, freight.....	No. 22	1,683	1,706	11
		\$ 100,325	3,476,163	3,578,938	37,411
16	Automobiles, passenger.....	No. 12	5,891	5,907	74
		\$ 53,781	8,339,704	8,399,537	392,578
17	Automobiles, parts of.....	\$ 30,601	11,729,731	11,760,367	20,694
	Total vehicles, chiefly of iron.....	\$ 327,577	26,393,390	26,729,697	538,908
Other iron and its products—					
18	Cream separators, materials for.....	\$ 11,707	1,105,208	1,116,915	630
19	Drums, cylinders, barrels and tanks.....	\$ 27,938	1,438,627	1,537,362	16,431
20	Furniture, house, office, etc.....	\$ 15,343	681,796	698,198	3,182
21	Pumps, hand, n.o.p.....	No. 241	22,956	23,854	443
		\$ 3,411	293,451	298,901	2,369
22	Stoves of all kinds.....	\$ 9,152	424,867	437,528	1,836
23	Valves, n.o.p.....	\$ 35,422	880,863	916,285	55,486
24	Manufactured articles of iron or steel or brass, for equipment of ships or vessels.....	\$ 343,565	834,408	1,185,022	273,683
25	Manufactured articles or wares of iron or steel, n.o.p.....	\$ 682,369	12,555,512	13,293,383	553,711
	Total Iron and its Products.....	\$ 16,698,085	226,855,725	245,625,703	8,985,903
VI. Non-ferrous Metals and their Products.					
Aluminium and its products—					
26	Alumina.....	cwt. —	1,181,313	1,181,313	—
		\$ —	1,675,020	1,675,020	—
27	Aluminium in ingots, blocks, etc.....	lb. 239,948	1,409,799	1,650,087	94,499
		\$ 98,456	468,052	566,944	31,897
28	Aluminium, household hollow-ware, n.o.p.....	\$ 10,446	305,179	324,992	3,857
29	Aluminium, manufactures of, n.o.p.....	\$ 8,954	330,462	361,227	9,594
	Total aluminium and its products	\$ 205,801	3,013,971	3,252,236	88,086
Brass and its products—					
30	Brass in bars and rods, coils, etc.....	cwt. 4,231	17,341	21,573	1,583
		\$ 91,811	386,788	478,634	23,364
31	Brass, old and scrap.....	cwt. 23,685	19,869	44,005	2,905
		\$ 390,000	270,496	663,468	32,681
32	Brass in strips, sheets or plates, not polished.....	cwt. 2,037	11,291	13,334	218
		\$ 66,574	309,486	376,350	4,846
33	Brass tubing, not polished, etc.....	lb. 282,363	748,154	1,030,676	32,210
		\$ 103,524	263,237	366,884	8,411
34	Wire cloth, or woven wire of brass.....	\$ 81,569	381,615	489,788	98,204
35	Manufactures of brass, n.o.p.....	\$ 229,982	2,473,200	2,735,360	180,654
	Total brass and its products.....	\$ 979,457	5,018,311	6,061,562	352,827

All Countries in quantities and values, by classes entered for consumption, years 1921-1924—con.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
192,051	192,117	37	256,120	256,157	60	352,797	352,857	1
42,548	42,909	141	60,845	60,986	1,517	101,092	102,609	2
116,091	130,182	5,488	152,005	157,634	31,265	294,321	326,532	3
206,758	233,395	21,414	242,789	264,303	34,150	429,565	463,751	4
885,135	920,334	50,219	1,181,335	1,280,670	129,641	2,068,976	2,364,652	5
4,090	4,154	163	5,039	5,203	63	4,861	4,928	6
683,209	702,847	15,216	641,801	657,085	35,859	850,700	887,437	7
1,756,634	2,130,341	230,448	987,507	1,231,113	647,849	493,253	1,150,692	8
235,134	235,134	720	238,318	239,038	—	201,587	201,587	9
115,233	117,958	254	65,148	65,402	7,916	85,784	95,416	10
1,853,129	2,636,903	359,716	2,688,637	3,122,014	1,291,730	2,103,671	3,412,840	11
8,521,363	9,274,698	402,647	7,517,515	7,960,172	669,784	8,635,502	9,387,379	12
21,645,893	24,060,973	1,325,539	22,553,246	24,068,579	3,326,940	24,636,435	28,268,927	13
177,932	181,173	2,508	222,778	225,525	2,012	291,363	293,541	14
1,420,591	1,511,308	77,378	1,253,944	1,350,685	127,963	1,338,034	1,494,478	15
1,059,952	1,181,696	134,282	1,374,149	1,540,909	234,902	1,651,996	1,964,791	16
790	806	23	1,059	1,082	18	1,308	1,340	17
1,492,290	1,537,765	77,169	1,811,936	1,889,105	52,227	1,841,485	1,910,808	18
7,092	7,181	34	11,362	11,402	30	9,517	9,549	19
9,062,184	9,501,362	135,275	11,710,972	11,857,165	150,382	9,378,494	9,532,350	20
10,189,926	10,211,791	59,521	14,065,719	14,134,874	41,910	16,747,228	16,808,323	21
21,994,154	22,588,897	344,899	28,758,858	29,124,904	335,439	30,317,496	30,693,457	22
436,693	439,067	26	254,480	264,709	1,590	357,961	361,352	23
465,061	527,718	9,074	563,950	661,191	12,692	662,004	753,752	24
331,762	335,442	6,775	316,725	324,420	3,821	395,177	400,005	25
15,060	15,558	305	26,880	28,226	442	21,194	22,729	26
254,631	257,334	1,971	338,366	343,505	2,525	244,850	251,560	27
267,836	272,866	2,669	303,565	310,824	2,412	318,831	324,211	28
435,658	493,075	4,325	394,268	398,618	33,229	663,215	696,444	29
142,886	428,547	85,162	292,780	378,492	65,518	356,532	449,707	30
7,092,294	7,706,497	503,323	7,318,024	7,872,223	575,256	8,663,133	9,301,283	31
99,938,235	110,210,539	12,671,433	124,370,193	138,724,455	18,241,866	152,176,749	173,473,503	32
164,561	164,561	986	777,380	778,366	—	1,251,019	1,251,019	33
520,455	520,455	749	1,460,156	1,460,905	—	2,226,436	2,226,436	34
597,572	692,942	516,144	503,697	1,031,041	559,229	139,920	700,269	35
133,966	165,923	109,403	109,411	221,089	136,673	51,939	189,286	36
287,996	334,136	9,203	580,764	630,441	9,761	425,685	488,752	37
246,010	279,243	16,928	299,416	331,737	17,627	465,685	504,317	38
1,320,389	1,475,670	176,399	2,693,229	2,946,761	180,902	3,417,323	3,724,511	39
6,477	8,060	4,663	12,662	17,325	5,895	6,040	11,935	40
116,270	139,634	61,080	197,100	258,180	89,756	127,970	217,726	41
23,655	26,614	7,609	17,722	25,452	1,764	15,451	18,097	42
111,016	144,142	75,769	179,599	256,206	19,954	158,372	183,489	43
13,126	13,344	296	16,729	17,025	1,649	10,691	12,340	44
258,736	263,582	5,582	314,948	320,530	33,050	230,954	264,004	45
776,545	808,755	71,477	1,476,117	1,547,594	416,838	1,399,356	1,816,194	46
182,587	190,998	18,093	358,311	376,404	98,759	385,225	483,984	47
181,576	289,821	145,004	151,408	316,885	116,134	83,592	228,724	48
1,680,100	1,904,052	172,675	1,438,040	1,651,451	188,592	1,857,633	2,115,151	49
2,824,078	3,234,269	483,452	3,427,293	3,975,839	566,298	3,708,141	4,380,968	50

¹Unrevised figures.

13.—Imports of Canada from the United Kingdom, the United States and in the four fiscal

No.	Principal articles by classes.	1921.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
VI. Non-ferrous Metals and their Products—concluded.					
Copper and its products—					
1	Copper, in bars or rods..... cwt.	183	331,707	331,890	30
	\$	7,127	5,716,937	5,724,064	736
2	Copper, in blocks, pigs or ingots..... lb.	—	7,448,447	7,448,447	—
	\$	—	1,396,327	1,396,327	—
3	Copper, in strips, sheets or plates, not polished..... cwt.	129	19,958	20,094	515
	\$	4,589	577,535	582,328	11,858
4	Copper tubing, in lengths of not less than 6 feet..... lb.	158,791	765,517	924,308	22,858
	\$	66,264	257,343	323,607	5,762
5	Copper, all other..... \$	319,660	1,180,722	1,586,200	33,279
	Total copper and its products..... \$	397,640	9,128,864	9,612,526	51,635
Lead and its products—					
6	Lead, old, scrap, pig and blocks..... lb.	16,112,823	2,329,589	24,125,900	868,522
	\$	1,396,777	191,472	1,971,392	38,682
7	Manufactures of lead, n.o.p..... \$	37,724	135,656	244,005	32,773
8	Lead, all other..... \$	58,731	50,120	108,851	17,555
	Total lead and its products..... \$	1,493,232	377,248	2,324,248	89,010
Nickel and its products—					
9	German, Nevada and nickel silver, mfrs. of..... \$	38,581	484,618	526,741	12,530
10	Nickel-plated ware..... \$	103,090	1,713,927	1,845,622	96,285
	Total nickel and its products..... \$	141,908	2,455,351	2,629,406	109,964
11	Precious metals and their products..... \$	665,280	2,036,554	2,753,571	442,215
12	Tin and its products..... \$	1,703,894	1,106,391	2,962,644	482,132
13	Zinc and its products..... \$	72,978	457,693	584,474	33,267
14	Clocks and watches..... \$	59,713	2,104,553	3,923,523	30,917
Electric apparatus—					
15	Electric batteries, storage..... No.	18	89,323	89,341	30
	\$	470	1,363,986	1,364,456	374
16	Electric dynamos and generators..... \$	93,766	1,227,398	1,323,664	37,713
17	Electric light fixtures and parts of..... \$	6,377	650,548	668,475	8,401
18	Electric meters..... \$	24,620	352,348	376,968	65,649
19	Lamps, electric incandescent..... No.	52,045	3,372,608	5,047,469	235,301
	\$	8,952	970,163	1,184,504	30,235
20	Motors, electric..... \$	41,021	2,578,807	2,628,734	219,422
21	Telegraph instruments and wireless apparatus..... \$	40,672	76,581	121,298	78,520
22	Telephone instruments..... \$	32,804	889,553	922,357	3,145
23	Electric apparatus, n.o.p..... \$	313,344	7,296,540	7,633,425	111,331
	Total electric apparatus..... \$	564,673	16,918,568	17,182,859	566,954
24	Printing materials..... \$	20,859	301,316	325,934	28,688
25	Lamps, side lights, head lights, etc..... \$	56,967	803,333	870,360	25,521
26	Ores of metals, n.o.p..... cwt.	—	42,960	43,105	—
	\$	—	176,967	176,989	—
	Total Non-ferrous Metals and their Products..... \$	6,682,748	45,959,914	55,651,319	2,523,868
VII. Non-metallic Minerals and their Products (except chemicals).					
Clay and clay products—					
27	Bricks, fire, etc..... \$	297,602	2,715,216	3,021,600	152,260
28	Tableware of china, porcelain, etc..... \$	3,531,267	149,974	4,499,183	2,571,626
	Total clay and clay products..... \$	5,067,492	4,805,451	10,781,592	3,517,852
Coal—					
29	Anthracite coal, grate, egg, stove, etc.... ton	—	4,360,569	4,360,569	110
	\$	—	37,576,001	37,576,001	1,355
30	Anthracite coal, n.o.p..... ton	—	478,990	478,990	—
	\$	—	1,482,147	1,482,147	—

All Countries in quantities and values, by classes entered for consumption, years 1921-1924—con.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
113,419	113,449	24	274,938	274,962	235	269,260	269,495	1
1,641,111	1,641,847	540	4,039,846	4,040,386	5,257	4,216,002	4,221,259	2
401,119	401,119	—	2,984,363	2,984,363	—	12,214,651	12,214,651	2
54,138	54,138	—	452,748	452,748	—	1,703,283	1,703,283	2
16,687	17,202	2,196	22,163	24,359	8,771	12,512	21,283	3
377,893	389,751	50,718	475,684	526,402	209,174	285,145	494,319	3
676,331	699,189	73,829	875,625	949,454	213,963	1,452,559	1,666,522	4
155,273	161,035	19,471	214,814	234,285	56,463	380,883	437,346	4
479,368	541,288	47,605	995,368	1,047,607	118,305	1,090,536	1,226,052	5
2,707,783	2,788,059	118,334	6,178,460	6,301,428	389,199	7,675,849	8,082,259	
387,972	1,491,662	1,561,181	928,752	2,713,910	1,342,207	439,311	1,781,518	6
24,275	71,392	69,571	60,559	139,800	68,660	35,067	103,727	7
67,680	139,552	67,156	81,376	200,311	81,793	78,044	219,697	7
9,161	28,362	37,820	34,349	72,610	22,647	17,335	40,888	8
101,116	239,306	174,547	176,284	412,721	173,100	130,446	364,312	
213,035	232,976	9,499	188,037	199,376	12,592	194,785	208,377	9
1,150,967	1,280,286	98,282	1,216,008	1,349,159	107,165	1,119,626	1,277,478	10
1,453,788	1,604,197	124,389	1,705,730	1,866,828	123,836	1,503,698	1,716,254	
1,051,458	1,548,876	501,398	1,071,046	1,596,898	585,139	1,325,808	1,956,270	11
720,159	1,324,590	704,046	906,374	1,804,814	873,984	943,537	2,154,588	12
285,719	403,646	25,890	381,376	493,733	15,443	383,168	526,490	13
1,215,891	2,129,811	52,780	897,397	1,680,481	47,599	1,084,890	2,387,788	14
24,797	24,827	62	14,957	15,019	1,238	19,512	20,750	15
802,359	802,733	133,617	553,473	687,105	221,062	543,792	764,854	16
1,313,419	1,356,725	21,055	1,271,810	1,316,732	148,777	1,063,610	1,214,221	16
385,972	409,347	8,783	415,344	448,124	5,945	520,444	546,487	17
171,879	238,954	52,976	174,247	227,223	49,141	220,546	269,892	18
801,375	3,196,717	254,047	689,783	5,558,042	157,919	601,076	5,349,033	19
173,353	576,319	40,842	131,488	757,952	21,953	106,830	689,407	19
1,530,030	1,753,161	93,796	1,480,135	1,581,547	108,130	1,811,321	1,928,600	20
58,726	137,246	90,193	785,165	978,669	108,418	931,744	1,043,547	21
579,028	585,561	346,763	449,744	796,507	59,727	422,391	483,282	22
4,310,487	4,437,823	143,109	2,846,645	2,997,085	138,830	3,570,512	3,735,791	23
10,040,201	11,033,465	967,963	10,375,454	12,109,775	944,706	12,239,850	13,976,635	
269,028	299,226	17,967	275,334	298,125	24,920	284,309	311,280	24
466,433	508,275	34,100	653,255	704,434	12,852	821,022	850,546	25
139,982	139,982	209	118,999	119,208	—	359,071	359,071	26
1,313,045	1,313,045	2,584	1,113,399	1,115,983	—	519,895	519,895	26
25,343,095	29,773,413	3,595,638	31,748,601	37,492,604	4,209,506	36,234,118	43,432,617	
931,282	1,083,544	219,146	1,185,954	1,405,100	226,121	1,771,188	1,997,200	27
178,585	2,469,022	2,201,765	111,587	2,946,768	2,465,925	90,995	3,296,317	28
2,474,815	6,778,365	3,313,175	2,847,785	6,873,622	3,797,288	3,473,498	8,132,190	
4,219,235	4,219,569	227,474	2,642,342	2,871,042	191,539	4,317,139	4,508,678	29
38,509,678	38,512,833	2,222,671	24,994,110	27,229,924	1,954,901	41,041,746	42,996,647	30
196,686	196,686	20,359	270,712	291,071	14,309	326,385	340,694	30
487,777	487,777	127,621	801,496	929,117	115,964	892,495	1,008,459	30

¹ Unrevised figures.

13.—Imports of Canada from the United Kingdom, the United States and in the four fiscal

		1921.			
No.	Principal articles by classes.	United Kingdom.	United States.	All Countries.	United Kingdom.
VII. Non-metallic Minerals and their Products (except chemicals)—concluded.					
Coal—concluded.					
1	Bituminous coal, slack, etc..... ton	399	2,359,758	2,360,157	—
	\$	2,000	11,393,600	11,395,600	—
2	Bituminous coal, round..... ton	1,082	13,046,030	13,047,839	5,083
	\$	6,492	60,831,440	60,844,352	30,620
	Total coal..... ton	1,481	20,245,347	20,247,555	5,193
	\$	8,492	111,283,188	111,298,100	31,975
3	Coke..... ton	—	548,582	548,582	—
	\$	—	6,247,931	6,247,931	—
	Total coal and coal products..... \$	10,446	117,851,412	117,868,288	100,860
Glass and glassware—					
4	Glass balls, and cut, pressed or moulded crystal glass tableware..... \$	42,753	919,585	1,019,744	47,478
5	Glass carboys or demijohns, bottles..... \$	32,482	1,495,384	1,584,207	19,424
6	Plate glass..... \$	396,638	499,298	2,144,513	310,742
7	Glass, window, common and colourless... \$	194,374	1,390,708	2,872,151	40,249
	Total glass and glassware..... \$	1,030,401	7,140,830	11,083,028	685,806
Petroleum, asphalt and their products—					
8	Asphalt and its products..... \$	275	694,898	695,854	185
9	Crude petroleum in its natural state..... gal.	—	206,367,754	311,719,057	—
	\$	—	20,067,907	22,652,012	—
10	Petroleum imported to be refined..... gal.	—	119,054,080	119,054,080	—
	\$	—	8,257,107	8,257,107	—
11	Coal oil and kerosene, distilled or refined. gal.	—	16,719,782	16,720,030	700
	\$	—	2,578,711	2,578,802	157
12	Lubricating oils..... gal.	16,476	5,110,415	5,126,992	14,117
	\$	9,234	2,510,277	2,519,610	10,439
13	Gasoline under .725 specific gravity..... gal.	—	9,400,589	9,400,824	—
	\$	—	2,615,773	2,615,887	—
14	Petroleum, products of, n.o.p..... gal.	86	41,432,890	51,251,309	2,450
	\$	64	10,073,839	11,016,740	4,424
	Total petroleum, asphalt and their products..... \$	25,562	47,878,962	51,438,351	32,224
15	Stone and its products..... \$	660,059	4,674,911	5,481,072	299,190
Other non-metallic mineral products—					
16	Diamonds, unset..... \$	1,385,614	146,109	2,384,150	1,137,654
17	Salt for the use of the sea or gulf fisheries. cwt.	245,718	301,133	1,289,617	48,123
	\$	203,370	152,922	508,841	32,515
18	Salt in bulk, n.o.p..... cwt.	50,640	1,016,187	1,084,595	11,058
	\$	36,045	324,940	362,756	7,236
19	Salt, n.o.p., in bags, barrels, etc..... cwt.	451,723	193,293	645,016	509,389
	\$	353,981	146,621	500,602	335,164
20	Sulphur and brimstone, crude..... lb.	1,041	237,787,380	237,809,435	8,290
	\$	133	1,729,093	1,729,808	211
	Total Non-metallic Minerals and their Products (except chemicals) \$	9,118,403	188,459,045	206,095,113	6,324,790
VIII. Chemicals and Allied Products.					
21	Acids..... \$	404,358	457,489	889,996	96,697
22	Total drugs, medicine and pharmaceutical preparations..... \$	1,307,077	1,679,047	3,457,913	751,285
23	Total dyeing and tanning materials..... \$	818,241	4,447,808	6,031,566	253,526
24	Total explosives..... \$	296,040	430,178	750,385	26,880
25	Total cellulose products..... \$	41,725	1,370,429	1,420,374	55,832
Fertilizers—					
26	Soda, nitrate of, or cubic nitre..... lb.	33,892	49,212,429	52,579,803	5,877
	\$	2,510	1,634,822	1,737,622	288
27	Potash, muriate and sulphate of, crude... lb.	589,678	4,210,616	18,314,748	544,110
	\$	35,970	166,756	840,323	16,423
28	Other fertilizers compounded or manufactured, n.o.p..... \$	2,770	1,181,898	1,187,481	18,484
	Total fertilizers..... \$	172,056	3,503,303	4,427,564	35,385
29	Total paints, pigments and varnishes..... \$	509,128	3,513,581	4,251,620	440,894
30	Total soaps..... \$	103,883	1,244,677	1,424,446	73,704
31	Perfumery, cosmetics and toilet preparations \$	94,487	470,763	1,202,585	63,577
Inorganic chemicals, n.o.p.—					
32	Sulphate of alumina or alum cake..... lb.	455,530	20,923,453	21,378,983	385,544
	\$	9,504	353,842	363,346	6,217
33	Ammonia, nitrate of..... lb.	2,707	661,757	1,981,806	—
	\$	404	34,390	142,999	—

All Countries in quantities and values, by classes entered for consumption, years 1921-1924—con.

1922.		1923.		1924. ¹				No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
2,748,258	2,748,258	233,573	1,941,371	2,174,944	200,472	3,823,753	4,024,225	1
7,033,899	7,033,899	1,112,227	7,046,127	8,158,354	757,096	8,912,564	9,669,660	2
9,998,718	10,003,801	416,758	8,574,331	8,991,993	69,399	11,544,184	11,613,587	3
32,193,596	32,224,216	2,268,306	33,593,823	35,867,082	370,310	34,341,956	34,712,351	4
17,162,897	17,168,314	898,164	13,428,756	14,329,050	475,719	20,019,637	20,495,360	5
78,224,959	78,258,725	5,730,825	66,435,556	72,184,477	3,198,271	85,234,500	88,432,856	6
232,174	232,174	2,907	440,076	443,883	820	690,821	691,641	7
1,673,171	1,673,171	23,371	4,267,603	4,290,974	9,661	4,973,926	4,983,587	8
80,273,866	80,376,526	6,273,270	71,085,239	77,706,045	3,587,672	90,654,947	94,212,712	9
431,266	552,859	38,696	516,371	672,363	45,594	472,302	645,926	10
673,975	738,523	30,007	819,711	895,487	36,793	978,552	1,110,860	11
182,255	1,265,506	558,006	173,930	2,070,568	600,732	46,004	2,315,744	12
28,917	624,386	373,150	48,196	1,205,639	215,324	12,403	1,100,946	13
2,964,336	5,392,534	1,310,929	3,133,528	7,071,759	1,220,857	3,123,670	7,548,874	14
539,501	586,837	6,969	559,724	566,741	3,660	276,311	280,431	15
254,948,364	391,292,960	—	261,750,905	397,603,716	—	330,809,783	418,775,453	16
12,960,563	19,610,945	—	13,001,891	20,051,248	—	13,989,588	17,439,802	17
51,947,659	51,947,659	—	80,214,293	80,303,615	—	107,588,498	111,021,631	18
2,743,337	2,743,337	—	3,165,388	3,167,330	—	4,172,747	4,345,248	19
8,261,791	8,262,611	—	3,426,575	3,431,332	—	4,382,955	4,383,635	20
451,264	451,473	—	296,168	297,595	—	345,402	345,620	21
4,925,550	4,940,282	14,159	7,308,740	7,322,916	11,813	8,907,415	8,918,388	22
1,667,740	1,678,915	14,392	2,136,641	2,151,072	7,445	2,465,066	2,472,870	23
19,358,013	22,102,721	—	26,575,137	28,028,341	—	36,831,624	36,831,720	24
4,008,254	4,801,664	—	5,614,671	5,932,923	—	4,932,304	4,932,370	25
1,230,044	1,232,494	—	1,618,439	1,618,439	2,351	1,395,856	1,398,208	26
259,714	264,138	—	308,113	308,113	1,351	267,585	268,937	27
25,988,191	34,242,063	32,451	29,310,478	36,715,069	28,256	28,689,371	32,341,725	28
2,620,977	3,135,916	376,220	3,489,510	4,060,806	532,527	3,965,004	4,758,628	29
54,012	3,146,466	604,158	48,900	1,955,495	797,445	5,322	2,377,534	30
423,832	1,037,143	37,662	411,614	1,601,005	24,725	544,065	1,359,148	31
164,598	291,036	19,725	153,986	325,579	11,245	218,899	328,639	32
876,134	941,968	884	1,296,035	1,311,990	8,449	1,287,399	1,309,582	33
274,784	296,656	550	327,185	329,530	4,871	306,324	313,593	34
212,872	722,485	675,931	323,874	1,046,082	479,742	207,353	743,323	35
150,135	486,032	392,368	205,952	612,613	260,292	154,758	430,111	36
157,168,316	157,198,236	1,232	245,867,692	246,020,164	10,447	258,380,934	258,673,230	37
1,271,397	1,272,170	67	1,670,736	1,673,662	323	1,725,425	1,730,712	38
118,216,653	137,604,110	12,508,655	114,711,860	139,939,012	10,451,716	135,702,177	155,899,393	39
298,921	493,101	87,367	340,622	538,009	103,900	275,568	511,880	40
1,312,828	2,444,323	897,925	1,095,881	2,354,606	1,060,342	1,198,433	2,655,544	41
2,898,562	4,093,510	211,090	2,815,218	4,054,130	172,458	2,611,299	3,787,341	42
147,142	201,184	45,874	293,953	601,744	63,446	550,811	753,457	43
994,246	1,076,384	57,637	770,637	892,868	91,697	963,858	1,118,068	44
22,832,331	22,838,208	24,140	31,337,703	31,702,506	43,456	27,165,404	27,859,115	45
581,619	581,907	916	795,199	809,538	1,699	708,062	727,198	46
3,640,223	8,652,794	2,304	4,714,703	24,965,729	67,592	1,192,158	12,469,098	47
125,459	236,100	86	83,975	473,017	1,253	23,417	196,704	48
539,664	569,129	4,025	297,881	331,518	35,127	372,722	486,268	49
1,647,301	1,881,805	5,670	1,582,383	2,051,975	38,806	1,523,195	1,838,553	50
1,926,621	2,838,466	620,603	2,526,472	3,550,455	696,921	2,499,665	3,666,437	51
1,044,852	1,211,553	91,926	1,093,664	1,280,654	100,667	1,132,234	1,323,618	52
441,363	955,259	75,668	507,021	871,568	155,120	457,761	864,396	53
16,047,073	16,432,750	206,926	23,884,973	24,547,299	675,528	25,993,346	26,668,874	54
275,352	281,574	2,535	326,379	329,810	6,164	351,441	357,605	55
808,090	2,017,078	2,976	506,922	3,819,694	13,065	296,996	1,392,695	56
45,375	127,484	222	29,717	262,743	1,036	19,976	96,216	57

¹ Unrevised figures.

13.—Imports of Canada from the United Kingdom, the United States and in the four fiscal

No.	Principal articles by classes.	1921.			
		United Kingdom.	United States.	All Countries.	United Kingdom.
VIII. Chemicals and Allied Products—concluded.					
Inorganic chemicals, n.o.p.—concluded.					
1	Sal ammoniac..... lb.	1,127,095	299,942	1,438,231	458,331
	\$	137,901	34,496	173,105	38,698
2	Copper, sulphate of (blue vitriol)..... lb.	573,638	1,780,164	2,353,802	678,996
	\$	49,492	124,307	173,799	39,427
3	Chloride of lime, etc..... lb.	720,461	38,729,921	39,450,426	456,022
	\$	47,374	1,176,515	1,223,901	14,976
4	Cream of tartar in crystals or argols..... lb.	123,632	236,337	525,583	189,611
	\$	65,044	116,403	293,120	52,479
5	Borax in bulk..... lb.	65,314	2,604,536	2,669,855	82,751
	\$	6,256	212,544	218,801	5,739
6	Soda ash or barilla..... lb.	67,982	12,145,267	12,213,249	689,740
	\$	1,766	314,247	316,013	16,120
7	Soda, bicarbonate of..... lb.	4,218,504	3,999,229	8,217,733	261,921
	\$	92,649	107,655	200,304	9,630
8	Soda, caustic..... lb.	11,016	8,155,035	8,313,151	982,778
	\$	443	337,060	344,045	40,853
9	Soda, sal..... lb.	11,200	9,223,189	9,238,263	171,695
	\$	170	185,610	186,098	4,939
10	Soda, sulphate of, crude, known as salt cake..... lb.	630,198	84,302,106	86,052,304	10,056
	\$	7,730	1,019,445	1,043,175	134
11	Soda, silicate of, in crystals or solution... lb.	987,983	27,539,839	28,797,822	577,216
	\$	29,035	314,587	346,758	16,610
12	Acid phosphate, not medicinal..... lb.	54,939	2,931,194	2,986,133	83,867
	\$	4,909	313,280	318,189	8,262
	Total inorganic chemicals, n.o.p...	\$ 867,961	6,019,595	7,149,704	504,894
Other drugs, dyes and chemicals, n.o.p.—					
13	Camphor..... lb.	1,594	57,128	60,984	2,627
	\$	4,757	93,329	101,668	2,481
14	Cyanide of potassium..... lb.	977,208	237,881	1,215,089	1,590,759
	\$	240,575	59,565	300,140	349,583
15	Ink, printing..... c	20,163	196,111	217,546	18,871
16	Polish or composition, knife or other..... \$	141,706	282,986	425,098	77,501
	Total Chemicals and Allied Products \$	6,046,972	28,128,104	37,887,449	3,237,117
IX. Miscellaneous Commodities.					
Amusement and sporting goods—					
17	Cinematograph or moving picture films, positives..... \$	29,581	1,629,424	1,660,892	29,640
18	Toys, all kinds, n.o.p..... \$	367,494	1,177,606	1,935,202	161,124
	Total amusement and sporting goods..... \$	532,651	3,101,831	4,245,844	302,900
19	Brushes..... \$	171,669	504,221	1,077,718	104,505
20	Containers, n.o.p..... \$	1,764,759	1,102,823	3,580,017	1,005,343
Household and personal equipment—					
21	Boot, shoe, shirt and stay laces..... \$	98,318	188,246	355,629	19,405
22	Boots, shoes, slippers, etc..... \$	206,406	285,877	524,555	46,035
23	Buttons, all kinds..... \$	62,839	832,545	1,213,064	40,057
24	Jewelry..... \$	203,392	811,858	1,174,102	91,057
25	Pocket books, portfolios, etc..... \$	179,766	509,784	754,326	134,397
26	Spectacle frames, eye-glass frames..... \$	420	211,102	211,553	113
27	Tobacco pipes, all kinds, etc..... \$	977,221	350,946	1,661,023	823,039
28	Braids, cords, fringes, tassels..... \$	123,806	455,171	792,688	63,591
	Total household and personal equipment, n.o.p..... \$	2,213,990	4,999,775	8,542,038	1,499,001
29	Musical instruments..... \$	131,465	3,096,608	3,486,744	74,883
30	Scientific and educational equipment..... \$	299,259	3,211,916	3,765,608	262,074
31	Ships and vessels..... \$	599,739	2,411,450	3,034,247	236,836
32	Vehicles, n.o.p..... \$	3,599	961,256	964,880	2,918
33	Works of art..... \$	337,306	435,903	875,350	231,681
34	Pencils, lead..... \$	68,256	793,686	873,967	48,922
35	Settlers' effects..... \$	1,700,692	8,872,413	10,749,819	1,409,020
36	Miscellaneous articles imported under special conditions..... \$	7,506,756	11,532,981	19,518,882	5,195,859
	Total Miscellaneous Commodities.. \$	17,061,864	59,150,028	72,688,072	11,470,236
	Total Imports, Merchandise..... \$	213,973,265	856,176,820	1,240,158,882	117,135,343

All Countries in quantities and values, by classes entered for consumption, years 1921-1924—concluded.

1922.		1923.			1924. ¹			No.
United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	
434,112	899,492	664,069	823,218	1,516,282	942,201	465,475	1,662,898	1
35,041	75,895	46,878	58,153	110,142	64,303	34,874	114,119	
833,740	1,512,738	2,123,306	987,506	3,110,935	1,739,695	773,648	3,530,788	2
56,651	96,079	105,087	58,763	163,874	87,315	47,045	183,358	
17,625,186	18,090,172	479,858	37,019,204	37,499,062	671,224	15,659,235	16,330,459	3
384,621	399,860	14,460	578,856	593,316	15,357	258,390	273,747	
163,287	858,104	206,584	121,741	962,008	176,933	98,224	899,189	4
46,287	216,945	36,603	26,502	180,247	28,049	18,423	146,140	
2,142,430	2,225,181	30,114	2,832,708	2,862,972	7,446	2,766,575	2,774,021	5
126,570	132,309	1,712	143,422	145,152	472	145,075	145,547	
6,032,891	6,811,850	343,525	8,167,413	8,510,938	911,135	3,571,936	4,649,418	6
110,679	130,972	5,920	127,116	133,036	12,609	51,797	67,502	
6,007,867	6,269,788	482,020	8,843,852	9,326,072	246,342	8,481,003	8,707,345	7
137,811	147,441	15,814	162,579	178,407	7,459	163,844	171,303	
12,952,191	13,937,519	248,402	11,247,705	11,500,207	1,794,468	8,972,609	10,771,227	8
501,653	542,845	9,331	370,425	380,419	59,397	291,271	351,308	
9,639,666	9,811,361	26,200	8,879,053	8,905,435	15,100	10,078,622	10,093,732	9
196,605	201,544	354	140,449	140,811	179	150,401	156,580	
58,837,971	58,848,027	11,475,712	56,364,393	68,009,505	11,231,068	48,367,515	63,894,564	10
707,065	707,199	109,231	578,048	688,149	124,897	543,607	711,741	
21,374,106	22,064,162	584,654	25,106,986	25,691,640	527,883	27,739,255	28,270,584	11
220,345	238,503	13,571	201,249	214,820	11,355	217,078	228,497	
3,395,316	3,479,183	41,596	3,434,152	3,475,748	44,707	3,046,959	3,091,666	12
253,923	262,185	3,367	211,620	214,987	2,194	198,313	200,507	
4,596,172	5,356,610	647,303	5,639,014	6,107,231	669,181	4,595,712	5,639,556	
50,404	61,667	8,897	58,375	77,860	4,000	55,314	70,563	13
44,962	54,216	7,635	52,204	68,746	3,145	52,809	63,884	
67,877	1,725,964	1,131,044	553,606	1,754,157	2,624,795	417,953	3,085,152	14
16,918	380,607	217,863	104,808	336,467	440,556	83,012	531,860	
144,497	168,337	15,770	189,544	206,372	20,207	195,477	216,388	15
146,261	225,040	110,630	183,667	294,888	118,772	215,822	335,456	16
18,143,315	24,630,333	3,636,013	18,414,962	25,793,101	4,203,326	18,419,577	26,088,041	
1,716,161	1,754,285	21,463	1,524,069	1,549,892	72,293	1,626,644	1,702,661	17
906,045	1,376,084	185,943	915,550	1,445,596	196,214	833,810	1,534,371	18
2,898,705	3,641,610	399,616	2,693,989	3,488,993	347,730	2,777,966	3,850,216	
316,319	607,000	114,395	306,797	601,593	131,388	301,833	794,997	19
707,023	2,130,109	1,154,871	800,962	2,354,200	1,282,793	938,820	2,703,605	20
84,704	122,916	20,799	110,527	152,774	18,910	82,119	139,322	21
171,632	243,922	69,297	322,927	428,183	140,072	264,449	427,297	22
524,140	690,382	80,668	406,743	683,460	63,016	372,237	633,154	23
663,877	880,205	108,155	723,028	986,321	148,431	941,170	1,405,036	24
450,185	652,796	172,609	468,790	722,127	221,690	378,380	753,129	25
114,876	115,011	389	185,241	186,150	895	226,135	227,522	26
133,180	1,322,322	681,984	83,108	1,067,527	584,966	78,965	1,000,292	27
554,465	819,971	68,601	458,792	830,661	63,501	435,903	646,581	28
3,721,279	6,259,714	1,505,394	3,736,043	6,455,862	1,496,959	3,637,629	6,559,223	
2,040,439	2,353,531	80,117	2,297,117	2,521,457	109,796	2,031,935	2,322,851	29
2,721,148	3,405,251	266,333	2,401,716	2,905,080	230,148	2,646,337	3,126,247	30
598,331	849,958	45,146	1,859,064	2,183,759	110,144	383,445	892,417	31
518,324	521,283	89,508	511,782	602,337	187,916	615,144	803,186	32
186,436	540,280	275,997	173,831	604,643	190,282	156,061	446,951	33
661,400	721,846	47,142	546,455	620,991	64,660	518,306	641,116	34
6,044,233	7,625,534	1,041,121	4,985,266	6,205,085	1,168,213	4,788,583	6,114,702	35
7,565,362	13,511,218	1,181,305	7,807,803	9,500,890	1,748,020	8,233,130	10,996,535	36
34,360,031	50,485,971	7,060,856	34,768,723	46,181,012	8,241,711	34,216,889	48,235,191	
515,958,196	747,801,332	141,330,143	540,989,738	802,579,244	153,613,903	601,295,121	893,366,867	

¹ Unrevised figures.

14.—Imports (Dutiable and Free) and Exports of Canadian and Foreign Produce, by Main Classes, during the fiscal years ended March 31, 1919-23.

Classes.	1919.	1920.	1921.	1922.	1923.
IMPORTS.	\$	\$	\$	\$	\$
Agricultural and Vegetable Products (except chemicals, fibres and wood).					
Dutiable.....	84,613,246	156,595,248	183,169,503	123,822,535	115,146,037
Free.....	72,881,819	85,250,899	76,261,607	48,842,988	46,523,747
Total.....	157,495,065	241,846,147	259,431,110	172,665,523	161,669,784
Animals and Animal Products (except chemicals and fibres).					
Dutiable.....	24,554,327	52,933,661	36,407,665	28,670,084	27,529,688
Free.....	16,950,767	42,165,082	25,314,725	17,975,705	19,207,086
Total.....	41,505,094	95,098,743	61,722,390	46,645,789	46,736,774
Fibres, Textiles and Textile Products.					
Dutiable.....	105,186,945	156,536,643	171,058,642	96,223,007	110,237,810
Free.....	73,003,296	75,023,234	72,549,700	43,774,130	59,909,148
Total.....	178,190,241	231,559,877	243,608,342	139,997,137	170,146,958
Wood, Wood Products and Paper.					
Dutiable.....	18,610,573	24,837,227	33,969,792	22,308,046	22,291,718
Free.....	16,789,279	18,346,040	23,479,592	13,483,441	18,553,826
Total.....	35,399,852	43,183,267	57,449,384	35,791,487	35,845,544
Iron and its Products.					
Dutiable.....	136,580,414	155,244,390	202,323,458	98,075,016	123,542,391
Free.....	55,946,963	31,075,486	43,302,245	12,135,523	15,182,064
Total.....	192,527,377	186,319,876	245,625,703	110,210,539	138,724,455
Non-ferrous Metals and their Products.					
Dutiable.....	22,580,060	32,781,310	39,923,514	22,608,912	25,858,276
Free.....	18,964,348	19,395,124	15,727,805	7,164,501	11,634,328
Total.....	41,544,408	52,176,434	55,651,319	29,773,413	37,492,604
Non-metallic Minerals and their Products (except chemicals).					
Dutiable.....	89,401,495	61,395,487	122,636,171	63,710,543	71,455,000
Free.....	46,048,167	60,560,689	83,458,942	73,893,597	68,534,012
Total.....	135,449,662	121,956,176	206,095,113	137,604,140	139,989,012
Chemicals and Allied Products.					
Dutiable.....	17,853,351	18,120,605	21,636,986	14,866,591	14,693,505
Free.....	16,346,663	11,922,218	16,250,463	9,763,742	11,099,596
Total.....	34,200,014	30,042,823	37,887,449	24,630,333	25,793,101
Miscellaneous Commodities.					
Dutiable.....	27,114,247	35,210,594	36,435,675	25,341,589	26,504,357
Free.....	76,285,745	27,134,186	36,252,397	25,144,382	19,676,655
Total.....	103,399,992	62,344,780	72,688,072	50,485,971	46,181,012
Total Imports.					
Dutiable.....	526,494,658	693,655,165	847,561,406	495,626,323	537,258,782
Free.....	393,217,047	370,872,958	392,597,476	252,178,009	265,320,462
Total Imports....	919,711,705	1,064,528,123	1,240,158,882	747,804,332	802,579,244
Duty collected (includes War Tax)					
	153,046,334	187,524,182	179,667,683	121,487,394	133,803,370

14.—Imports (Dutiable and Free) and Exports of Canadian and Foreign Produce, by Main Classes, during the fiscal years ended March 31, 1919-23—concluded.

Classes.	1919.	1920.	1921.	1922.	1923.
EXPORTS.	\$	\$	\$	\$	\$
Agricultural and Vegetable Products (except chemicals, fibres and wood).					
Canadian Produce.....	288,286,668	415,820,135	482,140,444	317,578,963	407,760,092
Foreign Produce.....	25,722,684	6,421,943	1,818,545	2,231,217	3,180,058
Total.....	314,009,352	422,242,078	483,958,989	319,810,180	410,940,150
Animals and Animal Products (except chemicals and fibres).					
Canadian Produce.....	244,990,826	314,017,944	188,359,937	135,798,720	135,841,642
Foreign Produce.....	9,304,079	6,565,660	1,433,501	1,434,161	1,654,518
Total.....	254,354,905	320,583,604	189,793,438	137,232,881	137,496,160
Fibres, Textiles and Textile Products.					
Canadian Produce.....	28,030,381	34,028,314	18,783,884	4,585,987	7,850,843
Foreign Produce.....	1,834,594	3,923,765	2,626,801	1,105,798	1,421,780
Total.....	29,864,975	37,952,079	21,410,685	5,691,785	9,272,623
Wood, Wood Products and Paper.					
Canadian Produce.....	154,569,154	213,913,944	284,561,478	179,925,887	228,756,205
Foreign Produce.....	308,949	535,319	551,189	378,344	409,011
Total.....	154,878,103	214,449,263	285,112,667	180,304,231	229,165,216
Iron and its Products.					
Canadian Produce.....	81,910,926	81,785,829	76,500,741	28,312,272	51,137,912
Foreign Produce.....	6,179,760	18,058,937	8,582,412	3,400,751	3,235,261
Total.....	88,090,686	99,844,766	85,083,153	31,713,023	54,373,173
Non-ferrous Metals and their Products.					
Canadian Produce.....	79,260,732	54,976,413	45,939,377	27,885,996	44,358,037
Foreign Produce.....	967,146	2,597,839	846,500	822,034	617,461
Total.....	80,227,878	57,574,252	46,785,877	28,708,030	44,975,498
Non-metallic Minerals and their Products (except chemicals).					
Canadian Produce.....	26,662,304	30,342,926	40,121,892	22,616,684	27,646,704
Foreign Produce.....	3,207,941	842,930	888,775	772,058	670,930
Total.....	29,870,245	31,185,856	41,010,667	23,388,742	28,317,634
Chemicals and Allied Products.					
Canadian Produce.....	57,406,349	22,883,685	20,366,279	9,506,170	14,046,940
Foreign Produce.....	1,331,193	3,556,274	1,111,680	427,338	196,864
Total.....	58,737,542	26,439,959	21,477,959	9,933,508	14,243,804
Miscellaneous Commodities.					
Canadian Produce.....	255,326,466	71,722,008	32,389,669	14,030,001	14,053,068
Foreign Produce.....	3,405,133	4,663,944	3,405,015	3,114,628	2,458,511
Total.....	258,731,599	76,386,852	35,794,684	17,144,629	16,511,579
Total Exports.					
Canadian Produce.....	1,216,443,806	1,239,492,098	1,189,163,701	740,240,680	931,451,443
Foreign Produce.....	52,321,479	47,166,611	21,264,418	13,686,329	13,844,394
Total Exports.....	1,268,765,285	1,286,658,709	1,210,428,119	753,927,009	945,295,837
Total Trade.					
Imports merchandise.....	919,711,705	1,064,528,123	1,240,158,882	747,804,332	802,579,244
Exports merchandise.....	1,268,765,285	1,286,658,709	1,210,428,119	753,927,009	945,295,837
Total Trade.....	2,188,476,990	2,351,186,832	2,450,587,001	1,501,731,341	1,747,875,081

15.—External Trade of Canada, by Main Groups and Degrees of Manufacture, according to Origin, year ended March 31, 1923.¹

Origins.	Imports for Consumption.			Exports of Canadian Produce.		
	From United Kingdom.	From United States.	Total.	To United Kingdom.	To United States.	Total.
Farm Origin:	\$	\$	\$	\$	\$	\$
Canadian Farm Products: ¹						
Field Crops—						
Raw materials.....	633,256	25,249,617	28,992,657	223,015,473	31,563,056	306,228,087
Partly manufactured..	23,641	2,375,321	2,430,203	62,672	264,018	520,954
Fully or chiefly manufactured.....	22,016,100	8,820,083	33,604,932	44,268,396	10,057,188	94,356,399
Total Canadian field crops.....	22,672,997	36,445,021	65,027,792	267,346,541	41,884,262	401,105,440
Animal Husbandry—						
Raw materials.....	3,071,020	15,274,898	24,076,971	5,138,852	25,525,449	31,879,629
Partly manufactured..	4,401,669	5,033,172	10,478,531	956,391	4,133,481	5,395,325
Fully or chiefly manufactured.....	33,250,626	12,147,235	48,669,813	50,021,088	3,501,120	57,130,205
Total Canadian animal husbandry.....	40,723,315	32,455,305	83,225,318	56,116,331	33,160,050	94,405,159
All Canadian Farm Products—						
Raw materials.....	3,704,276	40,524,515	53,069,628	228,154,325	57,088,505	338,107,716
Partly manufactured..	4,425,310	7,408,493	12,908,737	1,019,063	4,397,499	5,916,279
Fully or chiefly manufactured.....	55,266,726	20,967,318	82,274,745	94,289,484	13,558,305	151,486,604
Total Canadian Farm Products.....	63,396,312	68,900,326	118,253,110	323,462,872	75,044,312	495,510,599
Foreign Farm Products: ¹						
Field Crops—						
Raw materials.....	1,743,712	48,765,365	58,955,293	—	—	258
Partly manufactured..	129,086	7,733,428	40,992,885	3,076	159,521	163,238
Fully or chiefly manufactured.....	28,323,135	39,836,326	90,811,776	1,852,124	826,841	8,769,973
Total foreign field crops.....	30,195,933	96,335,119	190,759,954	1,855,200	986,362	8,933,469
Animal Husbandry—						
Raw materials.....	31,191	3,075,396	3,276,339	—	—	—
Partly manufactured..	61,354	112,440	303,041	—	—	—
Fully or chiefly manufactured.....	2,260,882	5,767,893	18,238,044	135,823	35,750	391,015
Total foreign animal husbandry.....	2,353,427	8,955,729	21,817,424	135,823	35,750	391,015
All Foreign Farm Products—						
Raw materials.....	1,774,903	51,840,761	62,231,632	—	—	258
Partly manufactured..	190,440	7,845,868	41,295,926	3,076	159,521	163,238
Fully or chiefly manufactured.....	30,584,017	45,604,219	109,049,820	1,987,947	862,591	9,160,988
Total Foreign Farm Products.....	32,549,360	105,290,848	212,577,378	1,991,023	1,022,112	9,324,484
All Farm Products:						
All Field Crops—						
Raw materials.....	2,376,968	74,014,982	87,947,950	223,015,473	31,563,056	306,228,345
Partly manufactured..	152,727	10,108,749	43,423,088	65,748	423,539	684,192
Fully or chiefly manufactured.....	50,339,235	48,656,409	124,416,708	46,120,520	10,884,029	103,126,372
Total all field crops.....	52,868,930	132,780,140	255,787,746	269,201,741	42,870,624	410,038,909

¹The expression "Canadian Farm Products" refers, in the case of exports, to commodities actually produced in their original state on Canadian farms. In the case of imports, it covers all commodities of which the basic raw materials are such as Canadian farms produce. "Foreign Farm Products" covers, in both imports and exports, materials or commodities such as Canada does not produce in their original form, e.g.—cane sugar, tea, cotton, silk, etc.

15.—External Trade of Canada, by Main Groups and Degrees of Manufacture, according to Origin, year ended March 31, 1923—concluded.

Origins.	Imports for Consumption.			Exports of Canadian Produce.		
	From United Kingdom.	From United States.	Total.	To United Kingdom.	To United States.	Total.
All Farm Products—concluded.	\$	\$	\$	\$	\$	\$
All Animal Husbandry—						
Raw materials.....	3,102,211	18,350,294	27,353,310	5,138,852	25,525,449	31,879,629
Partly manufactured.....	4,463,023	5,145,612	10,781,575	956,391	4,133,481	5,395,325
Fully or chiefly manufactured.....	35,511,508	17,915,128	66,907,857	50,156,911	3,536,870	57,521,220
Total animal husbandry	43,076,742	41,411,034	105,042,742	56,252,154	33,195,800	94,796,174
All Farm Products—						
Raw materials.....	5,479,179	92,365,276	115,301,260	228,154,325	57,088,505	338,107,974
Partly manufactured.....	4,615,750	15,251,361	54,204,663	1,022,139	4,557,020	6,079,517
Fully or chiefly manufactured.....	85,850,743	66,571,537	191,324,565	96,277,431	14,420,899	160,647,592
Total Farm Origin...	95,945,672	171,191,174	360,830,488	325,453,895	76,066,424	504,835,083
Wild Life Origin:						
Raw materials.....	231,968	5,091,374	5,783,765	4,735,200	11,353,135	16,260,997
Partly manufactured.....	48,604	418,822	1,065,110	24,548	48,194	86,053
Fully or chiefly manufactured.....	155,187	185,760	381,981	17,225	36,482	92,466
Total Wild Life Origin.	435,759	5,695,956	7,230,856	4,776,973	11,437,811	16,439,516
Marine Origin:						
Raw materials.....	9,737	801,951	1,127,381	163,213	8,653,469	8,860,239
Partly manufactured.....	—	—	—	—	—	—
Fully or chiefly manufactured.....	126,457	363,496	1,842,977	3,594,409	4,607,429	19,004,627
Total Marine Origin...	136,194	1,165,447	2,970,358	3,757,622	13,260,898	27,864,866
Forest Origin:						
Raw materials.....	9,035	627,768	647,428	50,916	15,100,572	15,975,405
Partly manufactured.....	6,312	9,652,403	9,691,152	16,427,603	85,571,963	110,894,346
Fully or chiefly manufactured.....	2,730,776	22,749,710	26,849,933	3,426,821	90,807,381	102,091,008
Total Forest Origin...	2,746,123	33,029,881	37,188,513	19,905,346	191,479,916	238,960,759
Mineral Origin:						
Raw materials.....	5,949,121	91,445,651	105,168,087	4,311,617	27,896,409	37,073,413
Partly manufactured.....	1,981,054	9,560,890	11,809,902	3,718,136	22,465,115	32,843,776
Fully or chiefly manufactured.....	22,534,925	180,422,151	213,947,541	12,736,708	14,907,801	63,996,903
Total Mineral Origin...	30,465,100	281,428,692	339,925,530	20,766,461	65,269,325	133,914,092
Mixed Origins—						
Raw materials.....	—	—	—	—	—	—
Partly manufactured.....	212,928	810,206	1,047,283	189,842	824,399	1,054,042
Fully or chiefly manufactured.....	11,388,367	44,668,382	62,386,216	4,217,312	10,741,445	18,383,085
Total Mixed Origins...	11,601,295	45,478,588	63,433,499	4,497,154	11,565,841	19,437,127
Recapitulation:						
Raw materials.....	11,679,040	190,332,020	228,027,921	237,415,271	120,092,090	416,278,028
Partly manufactured.....	6,864,648	35,696,682	77,818,110	21,382,268	113,466,691	150,957,734
Fully or chiefly manufactured.....	122,786,455	314,961,036	496,733,213	120,269,906	135,521,437	364,215,681
Grand Totals.....	141,330,143	540,989,738	802,579,244	379,067,445	369,080,218	931,451,443

16.—Summary of the Trade of Canada, by Main Groups, Compiled on a Classification According to Purpose, fiscal year ended March 31, 1923.

Groups.	Imports for Consumption.			Exports of Canadian Produce.		
	From United Kingdom.	From United States.	Total.	To United Kingdom.	To United States.	Total.
	\$	\$	\$	\$	\$	\$
FOODS, BEVERAGES AND SMOKERS' SUPPLIES.						
Foods.....	3,944,639	63,151,429	114,256,894	324,308,613	58,126,256	484,917,586
Animals for food.....	210	90,085	90,337	2,809,796	6,894,750	10,044,481
Breadstuffs.....	324,060	10,194,852	12,306,755	244,550,338	24,922,271	347,928,125
Grains.....	196,692	9,247,606	11,175,642	215,464,622	20,936,454	285,465,207
Flour and other milled products.....	37,686	550,866	618,630	28,597,889	3,957,412	61,850,786
Flour and meal.....	12,231	536,931	579,238	28,597,889	3,957,412	61,850,786
Other milled products...	25,455	13,935	39,392	-	-	-
Bakery products and prepared foods.....	89,682	396,380	512,483	487,827	28,405	612,132
Other farinaceous substances.....	65,138	736,372	946,326	-	-	176,564
Cocoa and chocolate	276,799	1,310,074	2,919,717	-	-	-
Fish.....	128,267	949,657	2,620,559	3,671,854	12,973,288	27,461,468
Fresh or frozen.....	3,163	623,082	886,264	149,114	8,527,290	8,691,605
Dried, salted, smoked, or pickled.....	63,367	92,852	877,612	4,260	2,787,858	8,958,675
Canned or otherwise preserved.....	61,737	233,723	856,683	3,518,480	1,658,140	9,811,188
Fruits.....	589,377	23,487,454	26,235,817	6,607,577	1,372,300	8,343,966
Fresh.....	246,432	16,115,160	17,355,159	5,928,036	1,208,376	7,427,232
Dried.....	98,868	6,282,001	7,151,971	31,015	4,657	66,349
Canned or otherwise preserved.....	244,077	1,090,293	1,728,687	648,526	159,267	850,385
Meats.....	210,959	8,985,807	9,347,701	23,533,221	4,037,013	28,244,664
Fresh, chilled or frozen.	12,085	5,473,975	5,522,917	670,131	3,758,377	4,774,854
Cured, pickled, preserved or prepared.....	198,874	3,511,832	3,824,784	22,863,090	278,636	23,469,810
Lard, lard compound and substitutes.....	22,134	1,365,702	1,387,889	464,288	1,641	971,185
Milk and its products	151,049	800,084	1,751,502	26,863,673	5,842,515	35,299,523
Milk and cream, fresh..	-	28,260	28,274	-	2,983,238	2,983,238
Milk preparations and products.....	151,049	771,824	1,723,228	26,863,673	2,859,277	32,316,285
Nuts.....	137,591	1,431,994	3,728,475	-	4,811	4,896
Cocoanuts and their products.....	6,054	18,260	337,336	-	-	-
Other nuts, not shelled..	25,582	661,895	1,042,855	-	4,811	4,896
Other nuts, shelled.....	105,955	751,839	2,348,284	-	-	-
Oils.....	27,070	350,834	887,033	-	-	-
Salt.....	412,643	687,123	1,267,722	-	1,272	11,828
Spices.....	517,658	407,537	1,180,265	-	-	-
Sugar and sugar products.	438,716	4,022,535	39,611,856	13,702,817	440,368	20,609,316
Confectionery.....	376,552	204,783	650,304	40,774	3,679	433,492
Molasses and syrups.....	57,837	264,634	2,648,816	-	21,292	21,889
Sugar.....	1,777	3,432,022	36,187,815	13,641,327	39,198	19,755,985
Miscellaneous.....	2,550	121,096	124,921	20,716	376,199	397,950
Vegetables.....	423,406	3,822,591	4,904,734	538,761	1,085,173	3,229,339
Fresh.....	112,815	3,217,384	3,575,070	100	911,367	2,376,905
Dried or canned.....	430	476,456	810,998	538,664	173,806	852,454
Pickles and sauces.....	30,161	128,751	518,666	-	-	-
Vinegar.....	37,556	13,458	55,032	-	49,718	50,616
Yeast.....	-	568,374	568,429	-	-	-
Other articles of food.....	182,006	3,926,896	4,446,745	1,566,285	501,136	2,541,615
Beverages and infusions.	20,560,109	1,110,832	35,275,633	70,612	3,815,489	6,057,404
Beverages, alcoholic.....	17,547,145	452,688	20,935,298	69,312	3,178,908	5,906,326
Brewed.....	116,808	2,425	120,362	51	2,696,400	2,866,351
Distilled.....	17,335,936	438,914	19,743,448	68,815	482,416	3,037,948
Fermented.....	94,401	11,349	1,071,488	443	92	2,027
Wines, non-sparkling..	54,584	10,355	635,290	443	92	2,027
Wines, sparkling.....	9,817	994	436,198	-	-	-
Beverages, non-alcoholic.	39,102	187,470	330,284	1,300	135,523	145,327
Lime and other fruit juices.....	19,608	135,315	173,418	1,300	30,248	31,779
Mineral waters.....	19,494	52,155	156,866	-	105,275	113,548
Infusions.....	2,973,862	470,674	14,010,051	-	1,058	5,751
Cocoa and chocolate.....	12,682	42,625	69,285	-	-	-
Coffee and chicory.....	128,046	349,879	3,584,009	-	1,058	5,751
Tea.....	2,833,134	78,170	10,356,757	-	-	-
Black.....	2,775,190	70,181	9,086,597	-	-	-
Green.....	57,944	7,989	1,270,160	-	-	-

16.—Summary of the Trade of Canada, by Main Groups, Compiled on a Classification According to Purpose, fiscal year ended March 31, 1923—con.

Groups.	Imports for Consumption.			Exports of Canadian Produce.		
	From United Kingdom.	From United States.	Total.	To United Kingdom.	To United States.	Total.
FOODS, BEVERAGES AND SMOKERS' SUPPLIES—concluded.	\$	\$	\$	\$	\$	\$
Smokers' supplies.....	1,593,640	402,318	2,661,256	566	20,346	56,289
Tobacco, manufactured....	861,340	227,493	1,235,056	566	20,346	56,289
Other smokers' supplies...	732,300	174,825	1,426,200	—	—	—
PERSONAL AND HOUSEHOLD UTILITIES.						
Books, printed matter, stationery and educational supplies.....	2,037,600	10,070,346	12,811,831	204,826	461,148	1,067,068
Books, pamphlets, printed matter and maps.....	1,287,811	7,411,710	9,090,476	133,023	371,213	649,009
Books.....	1,089,705	2,724,737	4,165,593	22,762	87,633	132,123
Charts and maps.....	18,564	69,014	92,395	—	—	—
Newspapers.....	25,767	1,951,886	1,979,950	110,261	283,580	516,886
Printed matter, n.o.p....	153,775	2,666,073	2,852,538	—	—	—
Stationery.....	252,505	1,150,466	1,451,976	41,828	19,415	301,761
Educational equipment (except text books).....	106,156	645,373	830,691	8,403	16,242	29,401
Works of art.....	391,134	862,797	1,438,688	21,572	54,278	76,897
Clothing.....	9,562,253	10,743,296	22,255,442	753,755	126,725	3,196,791
Blouses and shirtwaists...	7,899	232,467	280,272	—	—	—
Boots and shoes.....	489,266	1,247,456	1,782,388	322,513	66,539	1,497,361
Gloves and mitts.....	643,893	236,211	1,356,353	26,046	299	152,096
Handkerchiefs.....	1,094,066	48,563	1,490,273	—	—	—
Hats and caps.....	916,639	1,898,330	3,118,023	3,386	996	29,049
Hosiery.....	2,861,058	1,413,251	4,306,635	—	—	—
Shawls.....	97,453	4,176	104,473	—	—	—
Shirts.....	122,128	198,001	331,511	—	—	—
Underwear.....	430,796	460,973	921,460	86,299	5,268	366,585
Miscellaneous clothing....	2,899,055	5,003,868	8,564,054	315,511	53,623	1,151,700
Household utilities.....	9,836,183	9,118,335	19,871,631	798,388	263,143	2,604,110
Bedding.....	916,293	333,553	1,259,196	—	—	—
Cutlery.....	315,351	217,780	584,732	—	—	—
Floor coverings.....	1,481,829	259,282	2,060,480	3,150	49,407	89,637
Wool carpets.....	1,080,404	191,188	1,525,623	1,982	49,392	52,830
Other floor coverings....	401,425	68,094	534,857	1,168	15	36,807
Furniture.....	151,072	1,356,359	1,650,534	42,190	75,626	256,958
Glassware, chinaware and pottery.....	2,494,957	904,915	3,212,606	3,863	10,337	235,439
Glassware.....	38,696	516,371	672,363	—	—	—
Chinaware and pottery....	2,456,261	388,544	3,540,243	3,863	10,337	235,439
Household linen.....	3,053,821	629,836	3,910,387	—	—	—
Household machinery....	45,530	919,936	966,268	234,095	71,651	919,447
Kitchen equipment.....	78,183	1,669,618	1,816,963	17,309	26,510	103,908
Soap.....	91,289	1,089,631	1,275,984	227,965	1,251	300,890
Window curtains and fixtures.....	334,532	148,613	541,208	—	—	—
Miscellaneous household utilities.....	873,275	1,588,812	2,593,473	269,816	28,361	697,831
Jewelry, personal ornaments and timepieces....	825,300	1,839,814	5,046,005	6,965	4,954	21,162
Jewelry and personal ornaments.....	772,520	942,417	3,365,524	6,965	4,954	21,162
Timepieces.....	52,780	897,397	1,680,481	—	—	—
Personal utilities.....	700,724	1,699,687	3,114,550	106,035	—	206,006
Toilet articles.....	277,695	976,677	1,800,315	106,035	—	206,006
Other personal utilities....	423,029	723,010	1,314,235	—	—	—
Recreation equipment and supplies.....	469,639	5,213,365	6,303,723	752,302	2,518,526	3,554,352
Musical instruments and accessories.....	103,166	2,371,791	2,606,406	42,627	308,768	561,386
Picture machines and accessories.....	22,977	1,583,466	1,613,214	707,964	2,182,715	2,948,739
Equipment for indoor games.....	39,955	44,909	92,273	—	—	—
Miscellaneous articles for amusement.....	303,541	1,213,199	1,991,833	1,711	27,043	44,227

16.—Summary of the Trade of Canada, by Main Groups, Compiled on a Classification According to Purpose, fiscal year ended March 31, 1923—con.

Groups.	Imports for Consumption.			Exports of Canadian Produce.		
	From United Kingdom.	From United States.	Total.	To United Kingdom.	To United States.	Total.
	\$	\$	\$	\$	\$	\$
ELECTRICAL EQUIPMENT.						
Batteries.....	134,267	591,012	725,336	11,145	8,447	272,852
Dynamos and motors.....	114,851	2,751,945	2,898,279	1,114	25,959	43,219
Lighting equipment.....	50,100	814,983	1,482,851	-	-	-
Transmission equipment.....	41,234	385,825	430,879	11,887	1,318,416	1,585,027
Other electric apparatus.....	672,097	7,342,883	8,144,394	452,699	40,841	883,378
PRODUCERS' EQUIPMENT.						
Abrasives.....	114,465	1,361,804	1,486,028	3,193	2,038,007	2,057,423
Containers, wrapping and packing materials.....	1,750,992	5,111,518	7,704,695	1,311,841	367,763	3,451,177
Bags and sacks.....	97,413	678,488	843,694	81,917	24,438	243,908
Barrels.....	1,185	162,755	166,644	-	6,643	29,138
Cordage (except binder twine).....	326,722	184,049	521,328	14,996	19,879	83,655
Wrapping paper.....	44,871	540,649	663,769	1,214,237	255,248	2,887,376
Miscellaneous containers, etc.....	1,280,801	3,545,577	5,509,260	691	61,555	207,100
Farm equipment.....	208,425	9,778,321	10,659,838	401,222	3,014,079	8,423,940
Agricultural implements and machinery.....	31,836	8,362,064	8,435,242	290,981	1,346,840	6,066,893
Dairying equipment.....	2,627	228,057	260,362	2,802	90,008	176,190
Engines for farm purposes.....	2,066	3,872,786	3,874,883	-	-	-
Planting and tillage implements.....	775	906,726	907,602	29,667	776,480	1,917,705
Harvesting equipment.....	3,803	384,081	388,258	81,722	848	1,754,355
Seed separation machinery.....	39	2,271,645	2,271,878	-	279,548	694,128
Other agricultural implements and machinery.....	20,598	374,997	396,465	62,657	45,589	607,007
Parts of agricultural implements and machinery.....	1,928	323,772	335,794	114,133	154,367	917,508
Animals (except animals for food).....	68,570	475,099	549,405	5,574	882,264	959,227
Animals for improvement of stock.....	62,860	263,063	326,187	792	206,601	220,382
Other animals.....	5,710	212,036	223,218	4,782	675,663	738,845
Fencing.....	4,898	428,615	433,537	103,689	532,123	1,154,401
Harness and horse equipment.....	78,445	140,690	220,027	116	21,231	27,475
Plants, trees and shrubs.....	23,689	279,291	928,078	862	211,621	215,944
Miscellaneous farm equipment.....	987	92,562	93,549	-	-	-
Industrial equipment.....	3,130,548	26,914,363	30,368,916	1,345,201	934,814	3,294,812
Fisheries equipment.....	962,316	1,055,204	2,084,018	-	41,000	41,000
Industrial and trade machinery (except mining, electrical and printing machinery, boilers and engines).....	1,122,066	16,583,398	17,886,727	481,012	546,641	1,505,035
Office or business machinery.....	6,867	1,421,929	1,430,845	169,223	6,417	258,135
Metal-working machinery.....	77,841	1,814,447	1,941,645	-	12,816	54,547
Pulp and paper-making machinery.....	230,488	987,507	1,231,113	-	-	-
Textile and cordage machinery.....	359,716	2,688,637	3,122,014	-	-	-
Other industrial machinery.....	447,154	9,670,878	10,161,110	311,789	527,408	1,192,356
Mining and metallurgical equipment.....	104,656	1,515,287	1,619,943	-	-	-
Printing equipment.....	69,953	3,067,990	3,152,652	2,297	62,239	66,940
Photographic equipment.....	41,085	289,633	339,682	686,980	25,402	742,020
Tools, n.o.p.....	134,282	1,374,149	1,540,909	60,754	66,603	268,936
Transmission equipment (except electrical).....	178,687	688,556	867,391	1,372	3,383	180,318
Miscellaneous industrial equipment.....	517,503	2,340,146	2,877,594	112,786	189,546	490,560

16.—Summary of the Trade of Canada, by Main Groups, Compiled on a Classification According to Purpose, fiscal year ended March 31, 1923—con.

Groups.	Imports for Consumption.			Exports of Canadian Produce.		
	From United Kingdom.	From United States.	Total.	To United Kingdom.	To United States.	Total.
	\$	\$	\$	\$	\$	\$
PRODUCERS' EQUIPMENT—concluded.						
Light, heat and power equipment and supplies (except electrical and transportation).....	6,049,508	87,315,893	93,766,765	457,943	12,266,722	16,459,820
Boilers and engines (except for farms).....	235,834	2,107,824	2,343,668	3,017	60,414	78,823
Fuel.....	5,754,254	83,207,665	89,300,742	320,766	10,369,687	13,700,996
Coal.....	5,730,825	66,435,556	72,184,477	320,559	9,929,931	12,956,615
Fuel oils.....	—	12,417,757	12,738,143	207	211,046	514,435
Other fuels.....	23,429	4,354,352	4,378,122	—	228,710	229,946
Illuminants.....	3,389	445,664	451,577	7,860	1,835,357	2,507,967
Other light, heat and power equipment.....	56,031	1,554,740	1,670,778	126,300	1,264	172,034
Lubricating oils and greases.....	16,623	2,293,919	2,310,581	281	130,188	166,823
PRODUCERS' MATERIALS.						
Building and construction materials.....	2,694,635	23,426,008	28,845,017	12,080,676	72,385,900	92,899,277
Asphalt and its products.....	6,969	559,724	566,741	—	—	—
Brick and tile.....	435,378	1,755,236	2,207,750	1,110	118,510	127,569
Cement, lime and plaster.....	9,351	176,898	187,690	3	674,627	1,100,302
Glass for buildings.....	1,095,545	298,688	3,555,562	—	—	—
Structural iron.....	66,756	5,291,835	5,369,568	—	12,705	43,071
Iron piping.....	95,708	1,334,201	1,452,120	104,000	28,101	1,266,306
Nails.....	1,312	69,089	71,044	113,030	47,506	686,494
Lumber and timber.....	2,593	7,604,825	7,630,995	11,005,507	68,883,899	85,196,370
Paints and painters' materials.....	613,161	2,449,106	3,465,571	177,751	70,360	469,742
Paints and varnishes.....	172,198	507,549	686,016	116,014	10,473	281,083
Painters' materials.....	440,963	1,941,557	2,779,555	61,637	59,887	188,659
Stone, marble and slate.....	72,122	844,871	944,566	—	128,826	132,210
Railway materials.....	17,045	2,203,980	2,233,564	9,091	667,227	1,116,991
Miscellaneous construction materials.....	278,694	837,552	1,159,846	670,184	1,754,136	2,760,222
Farm materials.....	615,381	9,502,263	10,916,583	1,407,092	8,139,461	12,066,348
Fertilizers.....	20,934	1,836,043	2,323,251	560	3,303,039	3,905,400
Fodders.....	2,678	775,059	781,656	758,296	2,946,311	5,189,098
Seeds.....	182,658	2,015,745	2,526,795	574,239	1,556,744	2,194,496
Miscellaneous farm materials.....	409,111	4,875,416	5,284,881	73,997	533,372	777,354
Manufacturers' materials.....	67,457,531	174,252,554	282,542,071	21,516,541	191,619,720	235,487,973
For explosives and ammunition.....	111,911	377,784	747,761	—	—	—
For textiles, cordage and clothing.....	52,051,103	58,232,386	131,629,900	284,538	2,731,399	3,731,662
Fibres for spinning or cordage manufacture.....	6,675,372	34,876,732	43,934,983	79,007	2,601,350	2,695,471
Yarn for weaving or knitting.....	7,085,734	3,184,339	11,292,553	—	—	—
Piece goods for clothing.....	32,741,261	12,958,146	57,294,066	136,905	76,808	449,703
Thread for sewing.....	1,070,912	488,963	1,587,647	—	—	—
Buttons and materials for.....	79,829	356,656	681,081	—	15	5,991
Corset materials.....	55,346	271,465	327,843	—	—	—
Hat materials.....	154,385	1,608,107	2,205,932	—	—	—
Other textile, clothing and cordage materials.....	4,188,264	4,487,978	14,305,791	68,626	53,226	580,497
For dyeing and tanning.....	211,874	2,835,862	4,075,568	19,623	32,251	53,846
For fur and leather goods.....	1,150,877	12,929,314	19,196,378	5,784,994	22,081,149	28,439,108
Furs.....	280,668	5,515,551	6,832,177	4,768,534	11,338,707	16,292,278
Hides.....	149,684	3,747,647	7,947,268	62,173	7,249,145	7,422,439
Leather.....	711,093	3,082,660	3,822,586	954,287	3,493,297	4,724,391
Other materials.....	9,432	583,456	594,347	—	—	—
For smelters and metal refineries.....	224,085	4,838,864	5,603,283	3,701,604	16,596,796	20,658,551
For foundries.....	1,103,301	2,156,828	3,294,168	553,680	4,737,448	8,809,057

16.—Summary of the Trade of Canada, by Main Groups, Compiled on a Classification According to Purpose, fiscal year ended March 31, 1923—concluded.

Groups.	Imports for Consumption.			Exports of Canadian Produce.		
	From United Kingdom.	From United States.	Total.	To United Kingdom.	To United States.	Total.
PRODUCERS' MATERIALS—concluded.	\$	\$	\$	\$	\$	\$
For machinery, implements, tools and cutlery	1,849	1,330,144	1,347,200	15,029	132,119	160,529
For electrical goods.....	16,588	591,785	722,267	—	—	—
For furniture and wood- enware.....	13,694	2,473,169	2,505,482	449,400	125,092	1,229,338
Cabinet woods.....	4,193	1,439,397	1,453,644	20,030	55,354	219,464
Other materials.....	9,501	1,033,772	1,051,838	429,370	69,738	1,009,874
For musical instruments..	134,254	313,601	480,456	—	—	—
For wood pulp.....	109,298	2,248,784	2,361,811	—	10,755,655	10,755,655
For paper-making.....	180,047	1,739,815	1,940,026	4,854,347	36,415,402	41,397,218
For paper goods, printing and bookbinding.....	247,419	1,599,914	1,854,833	772,607	67,743,256	72,966,422
For rubber-working indus- tries.....	888,200	4,131,178	6,374,437	—	90,126	90,126
For vehicles (not including complete parts).....	234,771	2,518,096	2,752,867	—	—	—
For vessels.....	110,988	1,566,174	1,677,712	—	5,924	11,662
Other materials for chemi- cal-using industries.....	586,529	4,724,118	5,851,439	842,182	2,374,038	5,308,967
Other materials for metal- working industries.....	8,015,530	33,854,058	42,539,335	3,156,504	10,341,471	17,060,895
Other materials for wood- using industries.....	26	308,438	311,285	381,801	2,933,485	4,280,600
Other manufacturers' ma- terials.....	2,065,187	35,482,242	47,275,863	700,232	14,524,108	17,534,367
TRANSPORTATION.						
Vehicles.....	463,270	34,921,810	35,416,289	10,793,437	2,072,269	36,411,674
Automobiles and parts....	284,335	31,730,183	32,035,070	9,586,961	210,048	29,405,965
Other motor vehicles, not for railways.....	15,872	261,883	277,755	—	24,600	25,820
Bicycles and tricycles....	57,062	84,096	141,747	125	1,998	24,126
Railway rolling stock.....	—	1,037,280	1,037,280	—	1,802,042	1,933,857
Locomotives.....	—	213,022	213,022	—	1,584,875	1,699,590
Motor cars.....	—	138,494	138,494	—	217,167	234,267
Other cars.....	—	685,764	685,764	—	—	—
Other vehicles.....	89,508	511,782	602,381	25	24,211	65,970
Rubber tires.....	21,493	1,296,592	1,322,050	1,206,326	9,370	4,955,936
Vessels.....	70,738	1,036,163	1,434,238	2,400	94,793	173,290
Ships and boats.....	38,436	797,007	1,114,992	2,400	94,793	173,290
Equipment for ships.....	32,302	283,156	319,246	—	—	—
MEDICAL SUPPLIES.						
Alkaloids and their salts....	100,673	95,121	223,199	—	—	—
Biological medicines.....	1,950	203,341	231,393	—	—	—
Drugs, crude.....	2,845	153,833	195,554	23,031	318,591	368,264
Medicinal and pharmaceuti- cal preparations.....	819,219	1,359,823	2,592,864	215,337	30,284	425,267
Oils and gums, chiefly for medicinal use.....	117,008	111,289	299,715	—	101,228	102,859
Medical, surgical and dental equipment and materials.	176,942	1,650,302	1,924,383	—	—	—
ARMS, EXPLOSIVES AND WAR STORES.						
Arms.....	75,193	378,083	476,204	772	204	1,022
Military equipment.....	21,488	1,299	39,910	—	—	—
Ammunition and explosives..	72,138	894,314	1,000,401	225	102,290	331,287
GOODS FOR EXHIBI- TION.						
Animals.....	—	1,722,107	1,722,107	—	316,358	317,258
Other goods.....	95,566	1,052,140	1,158,788	—	—	—

17.—Value of Total Exports and Imports entered for Consumption, and the Duty collected thereon at certain Ports, during the fiscal years ended March 31, 1923 and 1924.

Ports.	1923.			1924.		
	Total Exports.	Imports for Consumption.	Duty Collected.	Total Exports.	Imports for Consumption.	Duty Collected.
P. E. Island.	\$	\$	\$	\$	\$	\$
Total	416,248	954,549	230,043	537,832	918,585	184,616
Nova Scotia.						
Halifax.....	29,584,386	16,956,623	3,725,929	30,822,995	17,051,617	2,607,627
Sydney.....	6,630,902	1,697,905	109,283	5,489,321	2,817,425	165,210
Other ports.....	10,530,099	6,224,087	438,446	9,829,318	6,194,464	559,776
Total	46,745,387	23,878,615	4,273,658	46,141,634	26,063,506	3,332,613
New Brunswick.						
McAdam Jet.....	13,185,277	63,934	8,850	16,119,970	126,568	15,441
St. John.....	55,127,568	20,687,800	6,500,288	57,326,588	20,622,689	3,197,830
Other ports.....	8,203,934	6,822,934	1,109,231	8,891,976	7,267,266	1,169,986
Total	76,516,179	27,574,668	7,618,369	82,338,534	28,016,523	4,382,257
Quebec.						
Abercorn.....	9,390,389	164,625	28,749	12,261,846	255,700	44,695
Athelstan.....	18,338,834	1,777,562	190,416	24,793,929	2,944,749	452,775
Beebe Jet.....	9,905,026	1,765,702	106,892	10,735,274	985,875	100,398
Coaticook.....	36,112,729	338,095	21,927	27,133,715	265,421	22,180
Montreal.....	173,758,813	173,938,311	32,307,801	190,282,115	191,867,086	30,900,361
Quebec.....	15,382,000	14,332,753	1,793,571	15,960,228	16,240,993	2,189,546
St. Armand.....	4,793,705	171,640	15,380	7,898,654	204,230	15,920
St. Hyacinthe.....	—	3,750,020	262,769	—	3,794,077	315,902
St. Johns.....	46,103,919	6,917,273	428,280	67,959,368	10,642,034	624,212
Sherbrooke.....	1,102,412	5,319,639	467,027	2,315,388	6,291,605	612,780
Three Rivers.....	887,104	5,157,371	410,417	606,278	5,028,882	434,433
Other ports.....	3,199,487	8,845,431	438,491	3,317,749	11,963,456	545,677
Total	318,974,418	222,478,422	36,471,720	363,265,821	250,484,108	36,228,879
Ontario.						
Brantford.....	—	4,830,290	490,485	—	6,006,728	536,134
Bridgeburg.....	41,916,782	5,222,382	773,180	50,081,196	6,199,858	1,035,614
Chatham.....	3,751	5,041,518	1,053,634	22,885	6,372,743	1,061,444
Cobourg.....	1,489,160	2,152,255	288,583	1,510,781	2,592,832	407,901
Cornwall.....	8,164,274	2,794,542	128,728	10,446,238	2,973,026	123,847
Fort Frances.....	12,547,756	1,316,741	230,951	14,539,303	1,186,563	220,441
Fort William.....	96,848,878	9,354,345	811,264	82,350,216	9,467,603	812,259
Galt.....	—	5,431,561	314,274	—	5,198,376	313,593
Guelph.....	—	3,992,882	350,839	—	4,220,425	361,430
Hamilton.....	673,586	32,479,169	3,666,542	3,372,884	36,260,293	3,995,853
Kitchener.....	—	7,853,094	735,307	—	8,557,911	727,684
London.....	—	10,453,714	1,390,633	—	10,962,583	1,393,979
Niagara Falls.....	61,255,202	5,897,753	780,767	79,666,324	7,410,202	868,721
North Bay.....	—	3,388,986	464,617	—	3,855,936	561,365
Oshawa.....	—	13,335,992	3,589,298	450	13,984,970	3,758,762
Ottawa.....	—	10,550,131	1,453,742	—	11,783,807	1,561,627
Parry Sound.....	34,176	1,329,079	173,197	73,156	1,465,722	252,992
Peterborough.....	—	4,427,663	547,542	—	5,147,193	658,396
Port Arthur.....	65,719,438	3,983,883	337,297	52,885,700	3,780,430	322,981
Prescott.....	9,360,605	2,817,961	240,369	9,619,480	3,201,339	369,087
St. Catharines.....	80,778	4,612,959	516,734	34,065	5,443,366	626,891
St. Thomas.....	14,500	2,490,048	319,898	122,270	3,189,212	451,044
Sarnia.....	28,585,923	13,281,262	704,891	32,886,466	13,276,714	714,505
Sault Ste. Marie.....	11,862,891	4,697,952	442,738	13,491,508	8,433,426	681,104
Stratford.....	—	2,413,292	280,798	—	2,785,778	344,548
Toronto.....	515,155	173,509,098	28,842,404	791,956	185,969,948	29,886,074
Welland.....	167,004	10,342,628	605,753	351,362	12,586,335	656,887
Windsor.....	37,178,681	34,023,989	7,479,387	45,884,518	40,195,943	8,547,866
Other ports.....	2,402,890	24,990,940	3,129,521	4,447,574	32,299,957	3,569,133
Total	378,821,430	407,016,109	60,143,373	402,578,332	454,809,219	64,822,162

17.—Value of Total Exports and Imports entered for Consumption, and the Duty collected thereon at certain Ports, during the fiscal years ended March 31, 1923 and 1924—concluded.

Ports.	1923.			1924.		
	Total Exports.	Imports for Consumption.	Duty Collected.	Total Exports.	Imports for Consumption.	Duty Collected.
	\$	\$	\$	\$	\$	\$
Manitoba.						
Brandon.....	21,670	1,058,620	117,531	65,783	1,181,362	129,954
Emerson.....	12,502,679	533,050	32,340	10,801,961	477,433	23,183
Winnipeg.....	31,316	36,415,244	6,758,816	33,059	37,104,719	6,963,426
Other ports.....	366,732	871,428	209,806	161,561	907,819	149,490
Total.....	12,922,397	38,878,342	7,718,493	11,062,364	39,671,333	7,266,053
Saskatchewan.						
North Portal.....	12,351,524	409,082	33,492	10,520,101	546,841	31,722
Regina.....	240,715	6,156,887	717,981	40,740	7,221,549	795,746
Saskatoon.....	—	2,528,943	364,183	—	3,473,582	427,863
Other ports.....	344,928	1,620,824	245,714	534,810	1,691,075	256,374
Total.....	12,937,167	10,715,736	1,361,370	11,095,651	12,933,047	1,511,705
Alberta.						
Calgary.....	—	4,675,301	945,634	—	5,950,713	1,076,552
Edmonton.....	—	3,986,966	822,629	—	5,342,137	1,048,818
Lethbridge.....	637,097	1,417,754	162,774	433,850	962,129	129,084
Other ports.....	—	315,665	42,754	—	295,690	43,313
Total.....	637,097	10,395,686	1,973,791	433,850	12,550,669	2,297,767
British Columbia.						
Abbotsford.....	1,948,578	242,837	35,954	3,116,102	143,445	22,183
Cranbrook.....	1,863,995	402,063	122,238	1,042,015	253,374	48,747
Fernie.....	2,636,976	961,410	439,414	2,116,751	897,526	359,423
Nanaimo.....	6,975,683	621,795	84,665	6,989,874	577,988	66,184
New Westminster.....	5,743,648	1,339,165	185,456	6,528,285	1,784,966	447,453
Prince Rupert.....	9,898,703	1,390,818	257,934	15,829,950	1,663,752	330,203
Vancouver.....	62,230,665	46,965,214	11,267,930	99,001,740	53,808,630	11,489,292
Victoria.....	4,245,665	6,680,000	1,797,662	4,143,347	6,670,556	1,850,548
Other ports.....	1,119,674	1,653,780	323,348	920,996	1,764,335	407,437
Total.....	96,663,587	60,257,082	14,514,601	139,689,060	67,564,572	15,021,470
Yukon Territory.						
Total.....	661,927	385,834	85,938	1,620,219	323,929	67,277
Prepaid postal parcels duty received through P.O. Department.....	—	44,201	12,014	—	31,376	7,546
Grand Total.....	945,295,837	802,579,244	133,803,370	1,058,763,297	893,366,867	135,122,345

NOTE.—The values given in this table of imports and exports at the leading ports of entry indicate that merchandise of the value stated was entered inwards or passed outwards at the ports in question, but do not imply that the imports were for consumption at these ports or that the exports originated there.

18.—Imports of Canada by values entered for consumption from British Empire and Foreign Countries under the General, Preferential and Treaty Rate Tariffs in the two fiscal years 1922 and 1923.

Countries.	1922.			1923.		
	General.	Preferential.	Treaty rates.	General.	Preferential.	Treaty rates.
	\$	\$	\$	\$	\$	\$
British Empire.						
United Kingdom.....	24,556,468	69,111,080	1,471,426	22,065,456	92,581,537	1,515,445
Africa—British East.....	1,042	6,024	—	109	4,791	—
British South.....	10,137	15,249	—	6,326	10,545	—
British West.....	—	218	—	—	942	—
Australia.....	207,446	—	2,425	108,449	—	1,615
British East Indies—						
British India.....	95,580	4,784,531	—	134,826	7,557,310	—
Ceylon.....	42,881	1,865,244	—	29,469	2,527,663	—
Straits Settlements.....	46,426	220,110	—	21,030	277,607	—
Other.....	373	—	—	7,025	—	—
British Guiana.....	36,774	6,113,425	—	31,424	5,629,666	—
British West Indies—						
Barbadoes.....	28,464	1,488,738	12	4,741	1,999,885	—
Jamaica.....	102,828	1,972,145	46	7,414	4,079,095	—
Trinidad.....	101,806	1,279,244	—	54,593	1,778,327	—
Other.....	17,388	884,506	6	11,698	1,480,538	—
Fiji Islands.....	312	1,965,843	—	1,971	485,831	—
Hong Kong.....	1,261,699	—	2,531	1,244,428	—	5,511
Newfoundland.....	53,373	—	—	88,456	—	—
New Zealand.....	223,571	800,448	—	147,432	701,744	—
Other British Countries.....	58,675	8,522	505	35,592	3,353	—
Total, British Empire	26,845,243	90,515,327	1,476,951	24,000,439	119,118,834	1,523,208
Foreign Countries.						
Austria.....	24,720	—	—	161,659	—	—
Belgium.....	1,995,616	—	418,468	3,048,944	—	549,547
France.....	7,601,916	—	4,445,246	5,684,438	—	4,918,005
Germany.....	889,039	—	—	1,276,090	—	—
Italy.....	842,465	—	90,489	837,675	—	96,708
Japan.....	2,487,595	—	5,072,067	2,304,013	—	4,415,870
Netherlands.....	2,201,309	—	125,494	2,426,589	—	159,625
Norway.....	59,771	—	267,658	141,131	—	314,820
Spain.....	1,421,649	—	305,364	906,422	—	578,398
Sweden.....	103,921	—	23,564	277,546	—	40,683
Switzerland.....	2,010,249	—	6,224,086	1,677,115	—	5,579,440
United States.....	312,093,534	—	—	332,237,955	—	—
Alaska.....	209,143	—	—	173,334	—	—
Other Foreign Countries....	27,762,947	—	106,913	24,795,977	—	14,317
Total, Foreign Countries	359,703,874	—	17,079,349	375,948,888	—	16,667,413
Total Dutiable Imports entered for Consumption	386,549,117	90,515,327	18,556,300	399,949,327	119,118,834	18,190,621

**19.—Aggregate Trade of Canada by Countries, for the fiscal year ended
March 31, 1924.¹**

Countries.	Imports for Consumption.	Exports of Canadian Produce.	Total Trade.
	\$	\$	\$
British Empire—			
United Kingdom.....	153,613,003	360,094,021	513,707,024
Aden.....	39,287	33,807	73,094
Africa—			
British East.....	17,444	320,939	338,383
British South.....	98,410	8,019,853	8,118,263
British West—			
Gambia.....	—	7,446	7,446
Gold Coast.....	228,734	97,877	326,611
Nigeria.....	—	88,508	88,508
Sierra Leone.....	23	16,032	16,055
Other British West Africa.....	55,537	102,755	158,292
Bermuda.....	51,534	1,424,596	1,476,130
British East Indies—			
British India.....	9,260,656	3,120,578	12,381,234
Ceylon.....	3,079,006	445,129	3,525,035
Straits Settlements.....	2,010,082	1,280,543	3,290,625
Other British East Indies.....	24,244	1,613	25,857
British Guiana.....	6,221,841	2,528,930	8,750,771
British Honduras.....	170,461	349,471	519,932
British West Indies—			
Barbados.....	7,020,415	1,619,811	8,640,226
Jamaica.....	3,289,478	3,132,042	6,421,520
Trinidad and Tobago.....	1,459,648	3,447,013	4,906,661
Other British West Indies.....	2,049,750	2,702,846	4,752,596
Gibraltar.....	—	37,197	37,197
Hong Kong.....	1,971,011	3,803,213	5,774,224
Malta.....	524	274,351	274,875
Newfoundland.....	1,474,920	10,507,868	11,982,788
Oceania—			
Australia.....	1,037,451	19,923,997	20,961,448
Fiji Islands.....	23,918	269,545	293,463
New Zealand.....	2,179,727	12,735,620	14,915,347
Other Oceania.....	—	63,598	63,598
Palestine.....	7,628	26,520	34,148
Total British Empire.....	195,385,632	436,475,719	631,861,351
Foreign Countries—			
Abyssinia.....	—	803	803
Argentina.....	4,173,562	7,305,866	11,479,428
Austria.....	168,776	52,458	221,234
Belgium.....	5,340,875	17,452,442	22,793,317
Belgian Congo.....	—	1,974	1,974
Bolivia.....	3,029	62,235	65,264
Brazil.....	1,439,497	2,624,310	4,063,807
Bulgaria.....	5,687	1,985	7,672
Chile.....	97,959	621,208	719,167
China.....	2,714,886	12,973,145	15,688,031
Colombia.....	480,008	240,166	720,174
Costa Rica.....	73,584	134,185	207,739
Cuba.....	10,781,047	6,776,605	17,557,652
Czecho-Slovakia.....	768,890	94,964	863,854
Denmark.....	94,793	3,749,799	3,844,592
Greenland, Iceland, etc.....	8,033	19,400	27,433
Ecuador.....	247	56,039	56,286
Egypt.....	34,241	953,329	987,570
Estonia.....	—	236,226	236,226

¹ Unrevised figures.

**19.—Aggregate Trade of Canada by Countries, for the fiscal year ended
March 31, 1924—concluded.**

Countries.	Imports for Consumption.	Exports of Canadian Produce.	Total Trade.
	\$	\$	\$
Foreign Countries—concluded.			
Finland.....	6,090	1,754,279	1,760,369
France.....	15,770,145	18,879,097	34,649,242
French Africa.....	404,162	77,491	481,653
French East Indies.....	—	8,275	8,275
French Oceania.....	—	11,456	11,456
French West Indies.....	—	63,436	63,436
Madagascar.....	510	104	614
St. Pierre and Miquelon.....	30,169	1,781,385	1,811,554
Germany.....	5,379,955	16,153,650	21,533,605
Greece.....	507,916	6,095,301	6,603,217
Guatemala.....	324,843	76,446	401,289
Haiti.....	161,250	401,659	562,909
Honduras.....	12,381	196,450	208,831
Hungary.....	8,234	27,405	35,639
Italy.....	1,849,844	18,501,578	20,351,422
Tripoli and Italian Africa.....	—	37	37
Japan.....	6,292,867	26,931,860	33,224,727
Korea.....	159	12,008	12,167
Jugo-Slavia.....	—	66,616	66,616
Lettonia ²	—	160,143	160,143
Liberia.....	—	3,533	3,533
Lithuania.....	525	5,887	6,412
Mexico.....	2,647,184	3,510,397	6,157,581
Morocco.....	1,655	15,030	16,685
Netherlands.....	5,360,344	9,488,976	14,859,320
Dutch East Indies.....	4,820,024	1,104,074	5,834,098
Dutch Guiana.....	—	108,187	108,187
Dutch West Indies.....	829	29,521	30,350
Nicaragua.....	16,593	121,984	138,577
Norway.....	698,547	5,252,239	5,950,786
Panama.....	1,706	206,648	208,354
Paraguay.....	—	72	72
Persia.....	132,509	1,206	133,715
Peru.....	4,038,668	568,295	4,606,963
Poland and Danzig.....	40,182	1,841,980	1,882,162
Portugal.....	260,401	1,015,496	1,275,897
Azores and Madeira.....	89,191	302,191	391,382
Portuguese Africa.....	—	323,015	323,015
Rumania.....	1,940	12,860	14,800
Russia.....	344,770	115,980	460,750
Salvador.....	94,179	81,998	176,177
Santo Domingo.....	8,800,060	298,252	9,098,312
Siam.....	46,485	115,781	162,266
Spain.....	1,669,569	794,720	2,461,289
Canary Islands.....	1,133	66,053	67,186
Spanish Africa.....	—	5,950	5,950
Sweden.....	1,056,121	3,716,603	4,772,724
Switzerland.....	8,420,673	1,289,581	9,710,254
Syria.....	5,113	21,136	26,249
Turkey.....	331,307	169,804	501,111
Ukraine.....	—	—	—
United States.....	601,295,121	430,715,496	1,032,010,617
Alaska.....	266,995	306,294	573,289
American Virgin Islands.....	52	2,145	2,197
Guam.....	—	615	615
Hawaii.....	153,136	183,188	336,324
Philippine Islands.....	108,760	288,508	397,268
Porto Rico.....	927	692,663	693,590
Uruguay.....	174,878	460,365	635,243
Venezuela.....	170,589	872,799	1,043,388
Total Foreign Countries.....	697,981,233	608,665,337	1,306,646,572
Total Imports and Exports.....	893,366,867	1,045,141,056	1,938,507,923
Continents—			
Europe.....	201,793,765	467,657,209	669,450,974
North America.....	640,021,420	468,372,563	1,108,393,983
South America.....	16,801,984	15,655,120	32,457,104
Asia.....	30,404,857	49,878,888	80,283,745
Oceania.....	3,502,992	33,476,527	36,979,519
Africa.....	841,849	10,100,729	10,942,578

¹ Unrevised figures. ² Or Latvia.

20.—Values of Exports of Home Produce from Canada to the British Empire and to Foreign Countries in the five fiscal years 1920-1924.

Countries.	1920.	1921.	1922.	1923.	1924. ²
	\$	\$	\$	\$	\$
British Empire—total	561,788,003	403,452,219	345,835,410	439,625,892	436,475,719
United Kingdom.....	489,152,637	312,844,871	299,361,675	379,067,445	360,094,021
Australia.....	11,415,623	18,112,861	10,678,600	18,783,766	19,923,997
New Zealand.....	6,987,008	11,873,000	4,128,531	8,286,262	12,735,620
Bermuda.....	1,249,020	1,523,992	989,113	1,078,372	1,424,596
British Africa.....	9,825,526	15,556,593	4,203,371	5,883,862	8,653,410
British Guiana.....	3,109,381	3,594,118	2,298,105	2,082,684	2,528,930
British Honduras.....	29,350	38,783	150,964	254,623	349,471
British India.....	4,818,053	4,196,350	1,637,145	2,027,317	3,120,578
Egypt and Sudan.....	227,652	914,718	494,575	756,934	953,329 ⁴
Straits Settlements.....	1,742,554	1,843,744	608,294	574,273	1,280,543
East Indies, all other.....	201,652	348,804	95,736	262,568	446,742
British West Indies.....	10,869,276	13,030,225	9,970,481	9,532,845	10,901,712
Fiji islands.....	124,005	170,879	124,390	214,471	269,545
Gibraltar.....	4,380,054	509,814	195,757	46,853	37,197
Hong Kong.....	1,343,867	2,000,825	1,411,699	1,943,808	3,803,213
Newfoundland.....	16,175,443	16,676,728	9,317,639	8,523,264	10,507,868
All other.....	136,902	215,914	169,335	306,545	398,276
Foreign countries—total	677,704,095	785,711,482	394,405,270	491,825,551	608,665,337
Alaska.....	432,744	482,312	293,184	332,756	306,294
Argentina.....	6,126,457	8,171,980	3,233,423	4,445,041	7,305,866
Austria and Hungary.....	23,168	129,536	—	7,478 ⁵	52,458 ⁵
Belgium.....	28,463,855	40,252,487	12,359,300	12,527,524	17,452,442
Brazil.....	2,703,488	2,835,191	2,002,449	1,929,067	2,624,310
Central American States ¹	181,351	473,936	335,517	390,732	611,063
Chile.....	890,960	864,309	290,678	321,715	621,208
China.....	6,665,805	4,906,570	1,900,627	5,125,967	12,973,145
Denmark.....	2,938,026	523,485	2,243,181	2,498,342	3,749,799
Dutch East Indies.....	1,492,775	2,426,087	951,569	654,859	1,104,074
France.....	61,108,693	27,428,308	8,208,228	14,118,577	18,879,097
French Africa.....	362,637	1,312,859	535,696	95,529	77,491
Germany.....	610,528	8,215,237	4,509,547	9,950,877	16,153,650
Greece.....	29,588,984	20,834,577	5,247,035	6,595,589	6,095,301
Hawaii.....	163,970	132,798	60,560	51,549	183,188
Netherlands.....	5,653,218	20,208,418	9,582,924	10,540,085	9,488,976
Italy.....	16,959,557	57,758,343	15,335,818	12,073,332	18,501,578
Japan.....	7,732,514	6,414,920	14,831,520	14,510,133	26,931,860
Mexico.....	410,825	1,086,197	1,197,597	3,291,096	3,510,397
Norway.....	4,798,299	5,119,365	3,913,372	2,197,784	5,252,239
Peru.....	273,967	614,472	71,683	415,917	568,295
Philippines.....	292,547	511,741	170,821	346,156	288,508
Portugal.....	197,385	1,476,894	87,664	384,848	1,015,496
Rumania.....	12,953,605	3,801,584	15,383	16,161	12,860
Russia.....	1,492,041	246,719	2,617,739	1,256,640	115,980
St. Pierre and Miquelon.....	748,573	590,055	429,190	599,270	1,781,385
Spain.....	1,096,053	5,110,725	816,977	977,061	794,720
Sweden.....	4,449,105	5,528,361	1,220,196	2,574,262	3,716,603
Switzerland.....	1,484,416	1,410,777	345,626	519,196	1,289,581
Turkey.....	2,336,717	2,791,538	641,422	1,446,184	169,804
United States.....	464,028,183	542,322,967	292,588,643	369,080,218	430,715,496
Uruguay.....	689,538	816,503	151,291	286,616	460,365
Venezuela.....	404,007	278,541	512,499	747,071	872,799
West Indies—Cuba.....	6,329,783	6,573,768	3,974,432	5,069,166	6,776,605
American Virgin Islands ³	2,256	1,131	2,275	2,773	2,145
Porto Rico.....	1,489,667	1,315,716	1,301,979	1,078,982	692,663
Santo Domingo.....	169,186	247,436	64,497	168,222	298,252
Other West Indies.....	513,503	185,097	111,515	179,022	92,957
All other.....	1,435,709	2,310,442	2,249,413	5,019,754	7,026,383

¹Guatemala, Salvador, Honduras, Nicaragua and Costa Rica.²Formerly Danish West Indies.³Unrevised figures.⁴Now included with foreign countries.⁵Austria only.

21.—Values of Imports into Canada of Merchandise entered for Consumption from the British Empire and from Foreign Countries in the five fiscal years 1920-1924.

Countries.	1920.	1921.	1922.	1923.	1924. ³
	\$	\$	\$	\$	\$
British Empire—total	174,351,659	266,002,688	149,109,253	179,638,805	195,385,632
United Kingdom.....	126,362,631	213,973,562	117,135,343	141,330,143	153,613,003
Australia.....	1,371,775	791,980	1,079,324	1,457,946	1,037,451
New Zealand.....	3,494,600	4,219,965	1,783,500	1,962,541	2,179,727
Bermuda.....	55,604	76,959	99,886	94,799	51,534
British Africa.....	919,078	262,782	154,050	402,396	400,148
British Guiana.....	7,412,931	9,085,108	6,166,664	5,669,471	6,221,841
British Honduras.....	302,043	134,739	79,756	67,213	170,461
British India.....	7,785,254	6,766,751	5,279,857	8,140,221	9,260,656
Straits Settlements.....	5,269,180	5,185,611	1,454,742	1,294,743	2,010,082
East Indies, all other.....	3,181,978	2,355,042	2,202,789	2,990,333	3,104,150
British West Indies.....	12,114,790	14,833,746	8,113,773	12,424,296	13,819,291
Fiji islands.....	714,306	1,510,599	1,966,180	489,794	23,918
Hong Kong.....	3,208,836	3,516,760	2,109,737	1,879,567	1,971,011
Newfoundland.....	2,146,414	2,886,203	1,392,026	1,398,726	1,474,920
Egypt and Sudan.....	10,271	391,326	68,563	23,520	34,241 ⁴
All other.....	1,968	11,555	23,063	13,096	47,439
Foreign countries—total	890,176,464	974,156,194	598,695,079	622,940,439	697,981,235
Alaska.....	415,585	309,463	276,807	197,834	266,995
Argentina.....	3,402,554	2,552,831	2,355,100	3,075,934	4,173,562
Austria and Hungary.....	49,723	96,164	34,637 ⁵	167,820 ⁵	168,776 ⁵
Belgium.....	911,407	4,693,368	3,845,718	4,994,787	5,340,875
Brazil.....	1,973,768	2,151,066	1,495,245	1,391,136	1,439,497
Central American, States ¹	343,200	376,301	519,142	392,812	521,580
Chile.....	240	97,579	20,471	230,066	97,959
China.....	1,205,229	1,897,346	1,413,527	1,460,696	2,714,886
Denmark.....	105,310	119,984	119,315	113,133	94,793
Dutch East Indies.....	3,700,400	993,764	833,101	1,734,990	4,820,024
Dutch Guiana.....	87,943	—	—	493	—
France.....	10,630,865	19,138,062	13,482,005	12,264,921	15,770,145
French Africa.....	—	2,240	11,573	137,110	404,162
Germany.....	44,255	1,547,685	2,041,016	2,568,409	5,379,955
Greece.....	729,830	817,157	1,033,981	467,765	507,916
Hawaii.....	403,687	225,755	114,900	143,524	153,136
Netherlands.....	2,266,169	4,237,791	4,002,147	4,970,668	5,360,344
Italy.....	999,040	1,745,330	1,387,370	1,601,225	1,849,844
Japan.....	13,637,287	11,360,821	8,194,681	7,211,015	6,292,867
Mexico.....	2,648,915	2,185,399	3,798,202	3,850,721	2,647,184
Norway.....	461,848	616,978	426,928	487,084	698,547
Peru.....	5,072,408	4,171,912	6,983,403	4,711,644	4,038,668
Philippines.....	47,014	229,907	189,264	128,183	108,760
Portugal.....	312,912	517,222	222,506	124,028	260,401
Russia.....	14,496	17,390	1,683	850	344,770
St. Pierre and Miquelon.....	40,297	56,257	19,026	21,050	30,169
Spain.....	1,528,298	2,317,179	1,779,408	1,696,910	1,666,569
Sweden.....	360,353	555,927	245,295	496,463	1,056,121
Switzerland.....	7,758,051	14,143,448	8,671,608	7,726,656	8,420,673
Turkey.....	233,478	683,656	852,507	178,286	331,307
United States.....	801,097,318	856,176,820	515,958,196	540,989,738	601,295,121
Uruguay.....	322,086	455,105	47,847	310,160	174,878
Venezuela.....	299,240	451,357	294,305	352,895	170,589
West Indies—Cuba.....	17,585,528	30,743,239	13,042,568	11,209,920	10,781,047
American Virgin Islands ²	—	296	—	106	52
Porto Rico.....	1,910	552	105	758	927
Santo Domingo.....	10,675,287	7,578,794	4,065,910	5,956,643	8,800,060
Other West Indies.....	—	5,176	1,505	1,552	829
All other.....	801,533	886,863	914,077	1,572,454	1,762,576

¹Guatemala, Salvador, Honduras, Nicaragua and Costa Rica.²Formerly Danish West Indies.³Unrevised figures.⁴Now included with foreign countries.⁵Austria only.

22.—Value of Merchandise imported into and exported from Canada through the United States during the fiscal years ended March 31, 1922 and 1923.

Countries whence imported and to which exported.	Merchandise imported through United States.		Merchandise exported through United States.	
	1922.	1923.	1922.	1923.
	\$	\$	\$	\$
United Kingdom.....	3,070,315	2,914,881	102,148,220	156,984,099
Australia.....	58,793	103,459	3,255,880	6,194,952
British Africa.....	19,921	40,060	678,357	1,532,255
British India.....	1,176,945	2,188,223	1,147,426	1,378,037
British East Indies (Ceylon).....	987,202	1,536,868	82,787	208,273
British Guiana.....	220,083	—	82,040	70,924
British Honduras.....	28,569	30,499	2,633	15,060
British West Indies.....	565,344	221,806	1,015,990	894,786
Egypt and Sudan.....	9,514	16,095	209,730	602,677
Gibraltar.....	—	—	43,566	1,545
Hong Kong.....	1,384	3,852	59,709	170,532
New Zealand.....	33,228	132,078	570,702	2,213,280
Straits Settlements.....	232,396	250,600	134,684	331,636
Other British Possessions.....	7,709	1,055	207,135	369,289
Total, British Empire.....	6,411,403	7,439,476	109,638,859	170,967,345
Argentina.....	721,073	983,101	1,766,708	2,864,541
Belgium.....	121,015	37,410	4,070,205	1,219,509
Brazil.....	641,946	702,324	1,045,321	1,794,549
Central American States.....	44,387	—	305,851	—
Chile.....	—	—	277,885	289,903
China.....	81,985	442,484	174,069	575,630
Cuba.....	457,869	488,951	1,697,469	2,856,608
Denmark.....	47,983	339	1,952,566	1,807,370
Dutch East Indies.....	41,214	130,986	900,174	636,280
Dutch Guiana.....	—	—	29,128	34,797
French West Indies.....	—	—	44,969	93,425
France.....	541,961	407,850	2,160,078	961,107
French Africa.....	—	—	117,046	16,097
Germany.....	83,976	113,935	1,974,721	3,431,538
Greece.....	155,574	114,251	2,981,044	2,391,573
Hayti.....	42,050	256	68,350	203,157
Netherlands.....	307,369	359,593	3,664,725	3,725,074
Italy.....	175,853	443,373	6,770,418	2,304,185
Japan.....	33,380	62,280	1,044,146	1,512,164
Mexico.....	88,865	64,850	1,081,046	2,981,958
Norway.....	3,268	3,877	624,189	744,348
Panama.....	—	—	132,365	189,616
Peru.....	204,407	—	51,617	122,617
Philippine islands.....	4,286	—	646	60,951
Porto Rico.....	—	—	247,057	356,310
Portugal.....	65,944	16,708	2,864	50,371
Rumania.....	—	—	15,138	16,011
Russia.....	—	—	281,648	87,531
Santo Domingo.....	819,971	326,803	62,023	144,854
Siam.....	—	—	43,157	47,277
Spain.....	366,535	279,579	731,565	965,468
Sweden.....	12,401	29,536	796,871	1,103,846
Switzerland.....	157,377	49,966	129,378	143,207
Turkey.....	365,838	40,452	641,108	1,200,195
U. S. of Colombia.....	—	110,323	121,986	126,671
Uruguay.....	—	54,123	73,303	204,460
Venezuela.....	47,324	37,540	508,341	711,939
Other countries.....	140,489	118,407	1,199,180	3,393,955
Total Foreign Countries.....	5,686,078	5,419,297	37,788,555	39,369,092
Grand Total.....	12,097,481	12,858,773	147,427,414	210,336,437

4.—Canadian-West Indian Trade.

In the 18th century the West Indian islands, small though they were in area, were considered as of the highest value as colonies, largely because they were the chief source of the world's supply of sugar in an age when beet sugar was unknown. The colonizing powers of Europe struggled long and bitterly for them, and in 1763 it was seriously proposed in England to retain the island of Guadeloupe, which had been captured from the French during the Seven Years' war, and hand back Canada to the French.

In the period following the American Revolution, inter-imperial trade was confined to British vessels, and the seamen of Nova Scotia played a prominent part

in the West Indian trade, and have continued to do so down to our own time. There now exists a well-patronized passenger service from Halifax and St. John to the West Indies, and as far as British Guiana, while the Canadian Government Merchant Marine maintains a freight service to West Indian ports.

At the present time, the British West Indian colonies, together with Bermuda, British Guiana and British Honduras, have a combined area of some 110,000 square miles and a total population of 2,160,000. Their products, mainly agricultural, are of a tropical character, complementary to our own. Both because of this fact and of our common allegiance, the West Indies and Canada have naturally been led into close commercial alliance. Thus the British preference, established in 1898, was applied to the products of Bermuda, the British West Indies and British Guiana. This continued until June 2, 1913, when a special trade agreement between Canada and certain West Indian colonies became effective, providing that Canada should obtain for a specified list of goods, a rate of four-fifths of the duty imposed on similar goods imported from any foreign country. Canada gave these West Indian colonies a corresponding preference on a list of specified articles, or the British preference, whichever was the lower. This agreement worked so well that a new agreement was made in 1920, under which Canada gave on nearly all goods a remission of 50 p.c. of the duty, while the West Indian colonies gave in return remissions of duty as follows:—Barbadoes, British Guiana, British Honduras and Trinidad, 50 p.c.; Leeward islands and Windward islands, 33½ p.c.; Bahamas and Jamaica, 25 p.c. This agreement came into force as regards most of the West Indies on Sept. 1, 1921, and as regards Jamaica on June 1, 1922.

A historical table showing Canadian trade with the British and foreign West Indies is given as Table 23, and current trend tables of exports and imports are included as Tables 24 and 25. Especially notable is the great drop in our imports from Cuba following 1921; this was due in the main to the great decline in the price of sugar.

23.—Value of Imports and Exports from and to British and Foreign West Indies, 1901-1924.

Fiscal Years.	IMPORTS FROM			EXPORTS (DOMESTIC AND FOREIGN) TO		
	British West Indies.	Foreign West Indies.	Total.	British West Indies.	Foreign West Indies.	Total.
	\$	\$	\$	\$	\$	\$
1901.....	1,275,452	605,010	1,880,462	2,300,007	984,306	3,284,313
1902.....	1,749,675	562,721	2,312,396	2,459,235	1,339,408	3,798,643
1903.....	2,403,077	579,594	2,982,671	2,701,147	1,471,843	4,172,990
1904.....	6,375,615	617,015	6,992,630	2,668,505	1,423,542	4,092,047
1905.....	7,517,880	667,869	8,185,749	3,420,399	1,460,801	4,881,200
1906.....	8,353,798	712,896	9,066,694	3,242,243	1,831,656	5,073,899
1907 ¹	5,730,934	567,719	6,298,653	2,425,946	1,497,240	3,923,186
1908.....	8,905,059	633,798	9,628,857	3,473,136	2,096,502	5,569,638
1909.....	9,890,358	495,715	10,386,073	3,290,291	2,006,362	5,296,653
1910.....	8,776,459	1,584,601	10,361,060	4,181,523	2,384,296	6,565,819
1911.....	10,268,470	2,171,520	12,439,990	5,213,399	2,501,599	7,714,998
1912.....	11,081,905	2,791,781	13,873,686	5,170,424	2,925,246	8,095,670
1913.....	9,867,017	4,658,890	14,525,907	5,040,015	2,327,508	7,367,523
1914.....	7,689,357	7,372,800	15,062,157	5,557,072	2,554,591	8,111,663
1915.....	9,678,539	5,112,932	14,791,471	5,423,302	2,095,000	7,518,301
1916.....	12,400,145	5,991,612	17,391,757	5,798,773	2,319,286	8,118,059
1917.....	22,510,156	4,509,658	27,019,814	7,422,772	4,085,227	11,507,999
1918.....	17,704,165	7,905,117	25,609,282	9,746,998	5,129,505	14,876,503
1919.....	15,522,859	7,980,671	23,503,530	14,238,189	6,503,851	20,742,040
1920.....	19,885,368	28,525,140	48,410,508	15,395,237	9,456,875	24,852,112
1921.....	24,130,552	38,478,641	62,609,193	13,327,596	8,565,268	26,892,864
1922.....	14,460,079	17,150,633	31,610,712	13,630,850	5,668,806	19,299,656
1923.....	18,255,779	17,403,265	35,659,044	13,149,149	6,877,142	20,026,291
1924 ²	20,263,127	19,817,749	40,080,876	15,204,709	8,506,653	23,711,362

¹ Nine months. ² Unrevised figures.

24.—Values of Exports (domestic and foreign) to the British and Foreign West Indies, by Countries, during the fiscal years 1922-1924.

Countries.	1922.		1923.		1924. ¹	
	Exports, domestic.	Exports, foreign.	Exports, domestic.	Exports, foreign.	Exports, domestic.	Exports, foreign.
	\$	\$	\$	\$	\$	\$
Bermuda.....	989,113	28,364	1,078,372	29,521	1,424,596	34,606
British Guiana.....	2,298,105	26,349	2,082,684	25,386	2,528,960	41,256
British Honduras.....	150,964	1,311	254,623	1,045	349,471	4,801
British West Indies—						
Barbados.....	1,377,984	17,273	1,271,950	28,133	1,769,811	29,343
Jamaica.....	2,214,164	32,268	2,805,012	17,323	3,132,042	20,305
Trinidad and Tobago.....	4,548,535	31,248	3,439,091	42,740	3,447,013	26,580
Other B.W. Indies.....	1,829,798	85,374	2,016,792	56,477	2,702,846	85,538
Total, British West Indian Colonies....	13,408,663	222,187	12,948,524	200,625	15,354,739	242,429
Cuba.....	3,974,432	13,670	5,069,166	25,755	6,776,605	4,413
American Virgin Islands ² ...	2,275	12	2,773	5	2,145	—
French West Indies.....	66,082	22	118,124	21	63,436	—
Dutch West Indies.....	45,433	49	60,898	22	29,521	713
Dutch Guiana.....	127,509	38	137,342	280	108,157	300
French Guiana.....	841	—	910	—	—	—
Hayti.....	71,967	—	214,267	—	401,659	—
Porto Rico.....	1,301,979	—	1,078,982	375	692,663	10
Santo Domingo.....	64,497	—	168,222	—	298,252	—
Total, Foreign West Indies.....	5,655,015	13,791	6,850,684	26,458	8,372,438	5,436
Total Exports to the British and Foreign West Indies.....	19,063,678	235,978	19,799,208	227,083	23,727,177	247,865

¹ Unrevised figures.

² Formerly Danish West Indies.

25.—Values of Imports entered for home consumption (dutiable and free) from the British and Foreign West Indies, by Countries, during the fiscal years 1922-1924.

Countries.	1922.		1923.		1924. ¹	
	Imports, dutiable.	Imports, free.	Imports, dutiable.	Imports, free.	Imports, dutiable.	Imports, free.
	\$	\$	\$	\$	\$	\$
Bermuda.....	39,796	60,090	19,587	75,212	16,570	34,964
British Guiana.....	6,150,199	16,465	5,661,090	8,381	6,190,490	31,351
British Honduras.....	171	79,585	404	66,809	2,359	168,102
British West Indies—						
Barbados.....	1,517,214	1,477,345	2,004,626	2,112,390	4,410,044	2,610,371
Jamaica.....	2,075,019	140,512	4,086,509	146,686	3,162,683	126,795
Trinidad and Tobago.....	1,381,050	297,608	1,832,920	278,382	1,180,623	279,025
Other B.W. Indies.....	901,900	323,125	1,492,236	470,547	1,787,083	264,065
Total, British West Indian Colonies....	12,065,349	2,394,730	15,097,372	3,158,407	16,749,852	3,514,673
Cuba.....	12,323,872	718,696	10,427,455	782,465	9,618,247	1,162,800
American Virgin Islands ² ...	—	—	—	—	52	—
Dutch Guiana.....	—	—	411	82	—	—
Dutch West Indies.....	—	—	—	—	—	829
Hayti.....	42,050	—	234,551	—	161,250	—
Porto Rico.....	5	100	106	652	922	5
Santo Domingo.....	4,065,870	40	5,955,814	829	8,800,060	—
Total, Foreign West Indies.....	16,431,797	718,836	16,618,337	784,028	18,580,531	1,163,634
Total Imports from the British and Foreign West Indies.....	28,497,146	3,113,566	31,715,709	3,942,435	35,330,383	4,678,307

¹ Unrevised figures.

² Formerly Danish West Indies.

5.—Statistics of United Kingdom Import Trade in Food Commodities.

About four-fifths of the total value of Canadian trade is transacted with the United Kingdom and the United States. The former country is the greatest customer for our surplus animal and agricultural products, though in the British market Canadian food products meet on equal terms the competition of the world. In Table 26 are given statistics for the five calendar years 1919 to 1923 inclusive, of British imports of animal and agricultural food products by the countries whence they are imported. The figures given in the table make it possible for the enquirer to investigate the rise or decline of the Canadian exports of each of the commodities under consideration in comparison with those of other countries and with the total.

26.—Quantities and Values of Selected Animal and Agricultural Food Products imported into the United Kingdom, by Countries whence imported, during the five calendar years, 1919-1923.

(Values converted at par of exchange. £1=\$4.86½.)

Imports by Countries.		1919.	1920.	1921.	1922.	1923.
Live Cattle ¹ —						
United States.....	No.	—	—	34,878	29,594	16,532
	\$	—	—	7,395,752	4,926,799	2,555,744
Canada.....	No.	—	—	31,792	19,959	45,417
	\$	—	—	6,017,663	2,884,649	6,118,080
Other countries.....	No.	—	—	4	4	522,446
	\$	—	—	58	306	46,139,412
Total.....	No.	—	—	66,674	49,557	584,395
	\$	—	—	13,413,473	7,811,754	54,813,485
Live Sheep ¹ —						
United States.....	No.	—	—	8,648	—	6,800
	\$	—	—	188,457	—	115,032
Canada.....	No.	—	—	2,056	—	201
	\$	—	—	45,751	—	2,433
Other countries.....	No.	—	—	—	—	365,454
	\$	—	—	—	—	5,081,370
Total.....	No.	—	—	10,704	—	372,455
	\$	—	—	234,208	—	5,198,835
Butter—						
Russia.....	cwt.	6,954	19,308	65,211	117,274	2
	\$	426,359	1,365,849	3,458,521	5,340,047	2/
Sweden.....	cwt.	—	4	808	16,554	39,202
	\$	—	214	40,014	850,737	1,838,578
Denmark.....	cwt.	290,291	817,268	1,250,176	1,423,796	1,862,295
	\$	19,212,797	57,245,846	73,411,744	67,985,790	81,918,264
Netherlands.....	cwt.	1,641	102,567	63,065	78,615	174,493
	\$	101,285	7,706,279	3,621,992	3,457,274	6,694,757
France.....	cwt.	2	8,734	542	21,157	94,389
	\$	78	586,136	30,095	845,900	2,877,027
United States.....	cwt.	216,495	37,261	1,888	34,354	10,578
	\$	13,368,285	2,711,473	54,312	1,686,903	480,811
Argentina.....	cwt.	265,675	138,862	401,354	356,158	491,256
	\$	16,275,170	9,921,157	24,416,232	13,293,013	19,218,281
Australia.....	cwt.	417,371	227,542	964,226	931,179	509,191
	\$	25,555,723	15,974,230	55,867,513	34,050,499	21,942,641
New Zealand.....	cwt.	318,872	275,406	709,381	1,103,444	1,130,765
	\$	19,030,769	18,630,963	41,337,773	45,458,088	49,668,270
Canada.....	cwt.	33,337	32,140	43,138	154,532	39,834
	\$	2,032,261	2,322,617	2,578,633	7,449,737	1,686,037
Other countries.....	cwt.	9,566	43,111	24,187	31,498	773,294
	\$	622,150	2,859,809	1,237,580	1,184,284	29,510,717
Total.....	cwt.	1,560,204	1,702,203	3,523,976	4,268,561	5,125,297
	\$	96,624,877	119,324,573	206,054,409	181,518,942	215,835,386

¹ For food.

² Included with other countries.

NORE.—Throughout this table the cwt. is the long cwt. of 112 lbs.; for eggs the great hundred = 120.

26.—Quantities and Values of Selected Animal and Agricultural Food Products imported into the United Kingdom, by Countries whence imported, during the five calendar years, 1919-1923—con.

(Values converted at par of exchange. £1=\$4.863.)

Imports by Countries.	1919.	1920.	1921.	1922.	1923.
Cheese—					
Netherlands..... cwt.	79,217	112,196	128,032	175,761	208,023
\$	3,252,340	3,524,411	3,742,253	3,605,986	4,261,024
France..... cwt.	1,279	9,324	4,406	14,776	1
\$	45,455	373,303	156,473	377,585	1
Switzerland..... cwt.	190	14,907	10,209	26,660	1
\$	22,319	526,584	514,056	1,064,267	1
Italy..... cwt.	180	951	7,226	40,256	104,976
\$	17,174	93,547	301,334	1,443,322	3,561,903
United States..... cwt.	16,166	73,344	49,063	21,993	42,597
\$	608,952	2,525,692	1,497,906	482,953	1,131,914
New Zealand..... cwt.	1,239,553	1,260,642	1,302,490	1,294,295	1,368,654
\$	41,148,635	45,162,185	42,472,612	28,623,052	36,536,554
Australia..... cwt.	112,736	63,279	83,622	99,720	40,370
\$	4,043,884	2,505,958	2,442,639	2,112,707	1,199,964
Canada..... cwt.	647,212	1,129,758	1,195,661	949,042	1,001,492
\$	23,821,058	42,897,379	32,445,307	21,868,381	25,716,464
Other countries..... cwt.	21,714	85,859	36,756	36,837	75,142
\$	870,534	2,809,678	1,333,822	952,461	1,903,894
Total..... cwt.	2,118,250	2,750,260	2,817,465	2,659,345	2,841,254
\$	73,830,351	100,418,537	84,906,402	60,530,714	73,412,618
Eggs—					
Latvia.....gt. hunds.	—	—	432,491	73,194	1
\$	—	—	1,894,155	228,276	1
Sweden.....gt. hunds.	—	45,461	190,786	43,269	1
\$	—	401,592	821,586	187,722	1
Denmark.....gt. hunds.	1,638,067	3,939,437	4,735,275	5,734,577	6,757,300
\$	13,510,431	34,224,139	26,549,482	27,472,173	26,700,110
Netherlands.....gt. hunds.	620	48,474	505,493	650,200	1,435,392
\$	5,743	358,906	2,792,513	2,780,215	5,234,046
France.....gt. hunds.	6,584	15,160	53,546	319,080	1,337,724
\$	34,383	120,869	276,392	951,395	3,809,486
China.....gt. hunds.	272,585	731,334	468,233	1,057,086	1,113,024
\$	1,682,344	4,013,053	2,250,308	3,109,927	3,133,822
Egypt.....gt. hunds.	758,728	556,740	642,000	1,259,590	1,209,332
\$	4,529,280	2,858,923	2,473,513	3,663,953	3,059,206
Serb-Croat-Slovene State ²gt. hunds.	—	—	648,342	460,474	419,844
\$	—	—	2,916,749	1,554,102	1,192,323
Canada.....gt. hunds.	1,476,962	807,281	684,480	495,729	877,759
\$	10,854,720	7,197,474	3,835,269	2,183,070	1,574,702
United States.....gt. hunds.	1,408,606	331,185	221,889	337,301	242,441
\$	10,731,448	2,692,294	1,232,619	1,410,399	974,058
Other countries.....gt. hunds.	82,243	576,253	1,974,969	3,231,171	7,155,872
\$	569,838	4,366,684	10,417,110	11,460,143	21,578,566
Total.....gt. hunds.	5,644,395	7,060,508	10,557,504	13,661,671	20,048,688
\$	41,918,187	56,304,111	55,459,696	55,001,130	67,256,321
Bacon—					
China..... cwt.	258,271	28,265	14,535	—	1
\$	11,037,327	1,191,477	349,329	—	1
Sweden..... cwt.	—	4,515	154,595	132,605	1
\$	—	184,734	6,535,422	4,400,912	1
Denmark..... cwt.	6,644	704,075	1,849,885	2,363,736	3,530,561
\$	320,241	35,606,334	82,392,686	81,081,665	95,562,664
Netherlands..... cwt.	—	4,152	258,741	155,339	—
\$	—	185,060	11,796,532	5,140,329	—
United States..... cwt.	5,893,514	3,362,264	2,509,379	2,463,368	2,828,662
\$	253,625,769	143,343,284	79,165,420	59,287,753	56,011,746
Canada..... cwt.	2,094,248	1,493,008	844,024	737,273	834,284
\$	91,886,244	63,893,182	30,256,456	21,033,655	18,719,964
Other countries..... cwt.	28,521	15,351	46,429	79,831	599,643
\$	1,277,758	718,611	1,341,424	1,480,635	15,507,828
Total..... cwt.	8,281,198	5,611,630	5,677,588	5,932,152	7,793,150
\$	358,147,339	245,121,682	211,837,269	172,915,265	185,862,205

¹Included with other countries. ²Or Jugo-Slavia.

26.—Quantities and Values of Selected Animal and Agricultural Food Products imported into the United Kingdom, by Countries whence imported, during the five calendar years, 1919-1923—con.

(Values converted at par of exchange. £1 = \$4.86½.)

Imports by Countries.		1919.	1920.	1921.	1922.	1923.
Hams—						
United States.....	cwt.	1,718,363	283,591	1,020,718	1,320,559	1,620,312
	\$	74,286,630	12,646,652	36,365,996	38,484,189	37,687,574
Canada.....	cwt.	74,762	25,776	93,906	96,370	114,308
	\$	3,179,997	1,153,760	3,194,884	2,881,154	2,643,048
Other countries.....	cwt.	20,029	14,984	12,663	16,313	12,471
	\$	836,565	662,256	428,242	416,771	345,329
Total.....	cwt.	1,813,154	324,351	1,127,287	1,433,242	1,747,091
	\$	78,303,192	14,462,668	39,959,122	41,782,115	40,675,951
Lard—						
United States.....	cwt.	1,833,685	1,149,600	1,990,380	2,093,520	2,075,680
	\$	77,517,561	50,512,890	44,558,894	33,946,639	32,946,798
Canada.....	cwt.	79,292	125,260	100,480	79,660	1
	\$	3,355,046	5,354,628	1,852,891	1,307,654	1
Brazil.....	cwt.	38,416	1,840	53,120	640	1
	\$	1,456,652	53,144	1,544,325	6,813	1
China.....	cwt.	158,354	143,500	82,200	2,220	1
	\$	5,887,085	5,368,430	1,781,351	31,580	1
Other countries.....	cwt.	68,583	26,300	49,740	123,300	360,460
	\$	2,659,531	970,802	1,184,614	1,955,578	5,789,449
Total.....	cwt.	2,178,330	1,446,500	2,275,920	2,299,340	2,436,140
	\$	90,875,875	62,259,894	50,922,075	37,248,261	38,733,247
Wheat—						
United States.....	cwt.	31,769,300	45,422,300	36,065,002	37,261,900	31,921,944
	\$	150,386,881	339,878,783	153,412,206	109,450,545	83,116,394
Japan.....	cwt.	—	2,420,500	1,299,600	—	1
	\$	—	17,531,485	6,101,014	—	1
China.....	cwt.	—	330,000	538,400	—	1
	\$	—	2,535,742	2,583,796	—	1
Argentina.....	cwt.	6,819,100	30,830,800	4,186,460	18,804,200	21,025,744
	\$	30,921,175	186,708,148	17,726,629	56,584,349	53,555,949
British India.....	cwt.	100	20,000	2,660,200	487,600	12,521,310
	\$	180	170,333	13,465,453	1,446,660	32,794,948
Egypt.....	cwt.	—	—	617,800	—	1
	\$	—	—	2,643,379	—	1
Chile.....	cwt.	—	—	323,000	—	1
	\$	—	—	1,340,095	—	1
Australia.....	cwt.	14,952,700	19,966,100	20,108,715	16,334,997	4,654,220
	\$	6,301,968	90,695,044	86,544,532	49,959,185	12,640,451
Canada.....	cwt.	17,864,900	10,189,400	14,589,320	22,909,800	28,486,785
	\$	85,212,043	75,831,651	59,453,988	67,110,039	73,971,138
Other countries.....	cwt.	36,900	149,226	90,297	581,137	2,311,620
	\$	167,297	848,451	345,105	1,580,912	5,733,575
Total.....	cwt.	71,143,000	109,328,326	80,478,794	96,379,634	100,929,623
	\$	332,989,544	714,199,637	343,616,197	286,131,690	261,812,456
Barley—						
Australia.....	cwt.	7,200	230,000	486,292	371,829	1
	\$	37,858	1,454,681	2,107,272	1,038,585	1
Tunis.....	cwt.	290,500	—	581,200	30,900	1
	\$	1,638,169	—	1,477,866	62,498	1
United States.....	cwt.	10,793,200	6,227,400	8,587,000	5,921,300	6,228,600
	\$	57,764,476	36,765,166	29,949,350	13,855,176	14,207,771
Chile.....	cwt.	351,300	867,700	769,960	450,200	826,700
	\$	1,904,935	5,435,444	2,471,474	1,156,553	2,145,553
Argentina.....	cwt.	221,500	419,000	57,600	25,200	1
	\$	1,090,971	2,054,112	137,610	51,674	1
British India.....	cwt.	5,100	—	—	37,200	1
	\$	24,625	—	—	77,711	1
Canada.....	cwt.	4,830,200	2,691,200	3,119,200	2,545,200	3,008,585
	\$	23,535,150	14,067,990	9,101,046	5,412,609	5,481,316
Rumania.....	cwt.	—	1,442,800	982,500	1,544,000	1,891,040
	\$	—	6,570,078	2,730,171	3,247,716	3,541,595
Morocco.....	cwt.	—	260,800	446,600	1,200	1
	\$	—	1,349,892	1,130,678	2,131	1
Other countries.....	cwt.	144,900	528,800	882,300	1,776,046	6,188,955
	\$	818,880	2,665,702	2,137,521	4,653,122	12,754,034
Total.....	cwt.	16,643,900	12,667,700	15,812,652	12,703,275	18,143,880
	\$	86,805,064	70,363,065	51,242,988	29,557,778	38,130,250

¹Included with other countries.

26.—Quantities and Values of Selected Animal and Agricultural Food Products imported into the United Kingdom, by Countries whence imported, during the five calendar years, 1919-1923—con.

(Values converted at par of exchange. £1=\$4.86½.)

Imports by Countries.	1919.	1920.	1921.	1922.	1923.
Oats—					
United States..... cwt.	2,956,421	194,600	434,800	2,957,500	1,721,450
\$	14,516,099	941,792	1,220,745	6,494,610	3,702,808
Chile..... cwt.	528,000	27,900	484,200	265,000	1
\$	2,793,102	117,422	1,268,778	625,810	1
Argentina..... cwt.	1,069,700	4,676,200	3,231,540	2,164,720	3,361,520
\$	9,939,407	20,995,131	7,856,260	4,803,158	6,407,799
Canada..... cwt.	940,500	697,500	3,591,800	3,328,920	3,002,103
\$	4,397,715	3,227,884	9,254,186	7,838,905	6,482,035
Other countries..... cwt.	216,800	533,200	614,496	640,762	1,677,582
\$	1,076,935	2,247,281	1,827,088	1,479,121	3,579,375
Total..... cwt.	6,711,421	6,101,600	8,356,836	9,356,902	9,762,655
 \$	32,723,258	27,412,576	21,427,057	21,233,272	20,172,017
Peas, whole—					
Canada..... cwt.	37,756	12,620	10,948	17,193	17,089
\$	429,172	202,935	150,613	136,461	111,171
Netherlands..... cwt.	6,445	41,306	337,937	449,369	1
\$	82,169	362,650	2,395,587	3,075,787	1
Japan..... cwt.	541,140	191,380	296,160	231,383	428,708
\$	6,825,690	1,543,161	2,042,443	2,036,457	2,662,129
British India..... cwt.	12,960	100	—	55,990	755,119
\$	170,528	1,587	—	147,908	1,770,172
New Zealand..... cwt.	171,580	86,630	94,877	92,154	156,797
\$	1,645,386	858,621	692,735	596,293	802,669
United States..... cwt.	83,280	36,384	62,414	30,095	1
\$	1,253,639	751,618	518,193	332,583	1
Australia..... cwt.	81,350	38,180	103,976	87,810	1
\$	772,472	315,228	564,188	464,553	1
China..... cwt.	155,900	114,420	280,290	111,910	1
\$	940,673	689,782	988,901	310,742	1
Other countries..... cwt.	42,980	50,700	84,714	170,091	620,243
\$	431,088	339,353	397,398	701,476	3,653,032
Total..... cwt.	1,133,391	571,720	1,271,318	1,245,995	1,977,956
 \$	12,550,817	5,064,935	7,750,059	7,802,259	9,009,192
Corn—					
Brazil..... cwt.	89,800	64,000	175,400	68,400	1
\$	427,605	242,842	426,763	129,658	1
United States..... cwt.	871,700	1,632,000	6,733,600	14,746,100	5,400,700
\$	3,318,088	7,109,776	16,861,316	27,353,392	10,966,985
Argentina..... cwt.	13,914,800	29,237,100	15,827,600	12,838,880	19,798,040
\$	54,251,804	114,401,015	38,431,458	27,030,026	39,634,377
Canada..... cwt.	188,600	343,500	5,789,200	5,664,425	805,700
\$	1,062,335	1,604,428	13,251,890	10,822,090	1,669,408
S. Africa (British)..... cwt.	1,400,700	430,700	4,253,583	2,754,157	1
\$	6,191,836	1,757,665	10,201,448	5,459,967	1
India (British)..... cwt.	—	2,400	51,900	60,800	1
\$	—	12,167	122,557	124,212	1
Other Br. Possessions..... cwt.	44,500	26,360	122,800	133,600	1
\$	227,716	105,680	304,761	251,650	1
Rumania..... cwt.	—	1,691,100	3,173,700	509,000	1,423,540
\$	—	6,253,462	8,726,780	1,089,195	2,881,261
Other countries..... cwt.	350,800	412,900	629,500	424,740	7,108,163
\$	1,301,176	1,719,637	1,443,546	845,929	14,288,908
Total..... cwt.	16,860,900	33,840,060	36,757,283	37,200,102	34,536,143
 \$	66,789,560	133,206,672	89,770,519	73,106,118	69,440,939
Flour, wheat—					
United States..... cwt.	10,274,070	5,837,400	7,900,742	4,576,701	3,838,716
\$	72,629,247	52,911,665	45,790,082	17,826,439	13,410,865
Australia..... cwt.	1,577,000	1,481,200	1,380,700	1,771,830	1,785,369
\$	11,144,136	11,318,514	7,920,140	6,706,637	5,917,229
Canada..... cwt.	5,566,100	2,318,601	5,866,019	6,596,440	5,580,521
\$	39,530,936	21,478,717	34,683,492	25,850,317	19,371,309
China..... cwt.	190,700	2,067,600	407,210	—	1
\$	1,302,729	15,856,296	3,044,635	—	1

¹ Included with other countries.

26.—Quantities and Values of Selected Animal and Agricultural Food Products imported into the United Kingdom, by Countries whence imported, during the five calendar years, 1919-1923—concluded.

(Values converted at par of exchange. £1=\$4.86½.)

Imports by Countries.	1919.	1920.	1921.	1922.	1923.
Flour, wheat—concluded.					
Japan..... cwt.	31,200	1,100	2,000	—	2
\$	214,323	7,446	9,534	—	2
Spain..... cwt.	—	—	81,200	—	2
\$	—	—	491,407	—	2
Other countries..... cwt.	72,000	263,839	203,184	529,750	513,869
\$	394,283	1,824,470	838,965	1,552,359	1,245,983
Total..... cwt.	17,711,070	11,969,740	15,841,055	13,474,721	11,718,465
\$	125,215,654	103,397,108	92,778,255	51,935,753	39,945,386
Oatmeal—					
United States..... cwt.	332,763	66,023	135,050	169,432	—
\$	2,553,769	514,275	848,586	654,620	—
Canada..... cwt.	219,618	86,368	193,950	99,827	—
\$	1,652,861	685,416	1,013,449	412,163	—
Other countries..... cwt.	4,376	2,421	1,074	3,557	—
\$	35,064	17,807	6,892	8,239	—
Total..... cwt.	556,757	154,812	330,074	272,816	3
\$	4,241,694	1,217,498	1,868,927	1,075,022	3
Rolled oats!—					
United States..... cwt.	653,383	258,947	205,142	288,980	—
\$	5,653,612	2,435,314	1,495,317	1,523,423	—
Canada..... cwt.	161,444	253,845	304,181	255,090	—
\$	1,367,937	2,693,062	2,468,763	1,734,753	—
Other countries..... cwt.	1,067	10,380	8,550	18,166	—
\$	8,088	80,928	45,216	78,173	—
Total..... cwt.	815,894	523,172	517,873	562,236	3
\$	7,029,637	5,209,304	4,009,296	3,336,348	3

1 Including other oat products in 1920 and 1921.

2 Included with other countries.

3 Not available; total oat products were 853,293 cwt., value \$3,903,843.

II.—INTERNAL TRADE.

1.—Interprovincial Trade.

Canada may be divided, according to Professor James Mavor, into the following five economic regions, each deriving its specific character from the predominant occupations of its people:—

1. *The Eastern Fishing, Lumbering and Mining Region* comprising the river valley and the gulf of the St. Lawrence, together with the Atlantic coast; in other terms, the Maritime Provinces almost as a whole, the northern part of the province of Quebec (excluding the former district of Ungava) and a portion of northern Ontario.

2. *The Eastern Agricultural and Industrial Region*, comprising the cultivated portions of the Maritime Provinces and of the provinces of Quebec and Ontario. In the latter provinces the cultivated areas extend along the north bank of the St. Lawrence, and along the valleys of its tributaries within the Canadian borders.

3. *The Central Agricultural Region*, extending from the Red River valley to the Rocky Mountains and from the Canadian-United States boundary to about 56° N. lat.

4. *The Western Fishing, Mining and Lumbering Region*, comprising the western portion of the province of Alberta, the whole of British Columbia and the southern portion of the Yukon Territory.

5. *The Northern Fishing and Hunting Region*, extending from the regions of permanent settlement northwards to the Arctic Circle and from the coast of Labrador to the Pacific and to the Alaskan boundary. This vast region is sparsely inhabited by indigenous nomadic tribes engaged in fishing and hunting for their own support, for exchange with the fur-trading companies and with individual whalers and traders who visit some parts of the region.

In addition, a division may be made between the industrial areas of Ontario and those of Quebec and the Maritime provinces by which the southern Ontario region is separated from the eastern areas and a division made between the English-speaking, unionized labour forces and the larger manufacturing units of the former and the largely-French, less highly organized labouring community and the generally smaller manufactures of Quebec and New Brunswick.

Great differences are apparent between the products of these various regions; even the fisheries and lumber products of the east are quite distinct from those of British Columbia. The needs of the people throughout the country are met to a great extent by the exchange between regions of the products of one for those of another.

Internal trade in Canada had its basis many years before Confederation in the exchange of the furs and lumber products of Quebec and Ontario for the fisheries and agricultural products of the Maritimes. It had been thought that the coal fields of Nova Scotia would furnish sufficient fuel for the needs of all the eastern part of the Dominion (bringing in return the products of the inland provinces), a trade which, if not entirely, has nevertheless been partly consummated. Later, the manufactures of Ontario and Quebec found markets from one end of the Dominion to the other, bringing back in exchange the farm, mineral and other products required by large urban communities and produced for exchange principally in western and northern regions. A further stimulus to the trade between east and west over the barren areas north of lake Superior may result from the recently increased production of the Alberta coal fields.

Thus, while many of the smaller communities and areas, like the primitive agriculturist, produce only for their own needs and are economically independent, the principle of comparative advantage is seen in the increased trade between the economic regions of the Dominion and so between provinces just as it has been between the nations of the world.

A monthly traffic report of the railways of Canada is published by the Transportation Branch of the Dominion Bureau of Statistics showing, for each province and for the Dominion as a whole, the total revenue freight traffic of all railways, divided into 70 classes of commodities. The data also show the quantity of each class that originated and terminated in each province. The reports are of use in computing the imports and exports of each province for each of the 70 classes of commodities. For example, if the total tonnage unloaded in Alberta during 1923, as shown in Table 27, is deducted from the loaded tonnage, the remainder of 4,724,868 tons represents the net exports from Alberta for the year 1923. The comparative figure for 1922 was 3,697,147 tons. These statistics show rail traffic only, a limitation which should be borne in mind in connection with the trade of provinces favoured with facilities for water transportation.

Statements similar to that in Table 27 may thus be compiled for any of the 70 commodities for which statistics are collected, showing the interprovincial trade by rail in these commodities.

27.—Railway Traffic Movement of Principal Commodities in Canada and its Provinces, in tons, for the calendar years 1922 and 1923.

Provinces.	Originating in Canada or specified province.		Received from foreign connections.		Total freight carried.	
	1922.	1923.	1922.	1923.	1922.	1923.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Prince Edward Island.....	102,536	95,263	—	—	102,536	95,263
Nova Scotia.....	5,588,797	6,502,523	32,502	23,718	5,621,299	6,526,241
New Brunswick.....	2,214,018	2,425,470	321,465	349,279	2,535,483	2,774,749
Quebec.....	10,177,253	11,678,486	4,073,657	6,238,255	14,250,910	17,916,741
Ontario.....	19,999,290	22,770,918	21,134,670	27,151,580	41,133,960	49,922,498
Manitoba.....	5,300,698	4,745,136	306,746	330,205	5,607,444	5,075,341
Saskatchewan.....	7,726,651	8,043,665	279,437	261,289	8,006,088	8,304,954
Alberta.....	6,939,778	7,987,487	19,168	34,474	6,958,946	8,021,961
British Columbia.....	4,224,148	4,713,453	413,986	406,358	4,638,134	5,119,811
Canada.....	62,273,169	68,962,401	26,581,631	34,795,158	88,854,800	103,757,559

Provinces.	Terminating in Canada or specified province.		Delivered to foreign connections.		Total freight terminating.	
	1922.	1923.	1922.	1923.	1922.	1923.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Prince Edward Island.....	170,116	160,045	—	—	170,116	160,045
Nova Scotia.....	5,024,047	5,851,439	312,978	283,964	5,337,025	6,135,403
New Brunswick.....	1,467,871	1,513,587	1,375,207	1,585,712	2,843,078	3,099,299
Quebec.....	10,751,586	13,115,926	7,461,519	7,982,621	18,213,105	21,098,547
Ontario.....	31,095,488	38,228,672	14,180,815	17,334,312	45,276,303	55,562,984
Manitoba.....	4,504,749	4,411,242	207,452	212,655	4,712,201	4,623,897
Saskatchewan.....	3,125,652	3,163,355	489,699	537,295	3,615,351	3,700,650
Alberta.....	3,257,60	3,295,733	4,177	1,360	3,261,799	3,297,093
British Columbia.....	3,151,467	3,394,033	1,407,059	1,850,215	4,558,526	5,244,248
Canada.....	62,548,578	73,134,032	25,438,996	29,788,134	87,987,484	102,922,166

2.—Grain Trade Statistics.

The Canada Year Book 1922-23 contained on pages 581 to 583 a historical summary of the more important points respecting the shipment, inspection and sale of Canadian grain under the Canada Grain Act.

Movement of Canadian Wheat, Crop Year, 1922-1923.¹—A *résumé* of the Canadian wheat movement naturally begins with a description of the pool fed chiefly by the crop of the western inspection division. The wheat crop of 1922 marketed in the western division during the crop year from September 1, 1922, to Aug. 31, 1923, amounted to 376.3 million bushels. Other acquisitions, including a carry-over from the previous crop year of 12.8 million bushels, brought the stock of the western pool to a total for the year of 389.1 million bushels. As for distribution, out of the 295.2 million bushels which were commercially disposed of, the shipments to the eastern division of 130.4 million bushels and the direct export to

¹See also diagram on page 547.

Great Britain of 117 million bushels were the chief items. The direct exports to the United States were 12·7 million bushels and to other countries 11·1 million bushels. The total shipments from the western pool were thus 271·2 million bushels. The all-rail movement eastward from the western division, including shipments to the Ogilvie Flour Mills Co. at Fort William, for grindings, were 20·4 million bushels. Lake shipments from Fort William and Port Arthur were 229·2 million bushels, 109·2 million bushels going to Canadian ports and 120·0 million to United States ports. The shipments to Canadian ports represent an increase of 48·4 p.c. and to American ports an increase of 17·6 p.c. over 1921-22. The principal Canadian lake ports were Port McNicol, with receipts of 22·1 million bushels by water, Goderich, with receipts of 14·4 million bushels by water, and Port Colborne, with total receipts of 42·6 million bushels, an increase of 13·1 million bushels over the receipts during the previous crop year. Buffalo was of chief importance among the United States lake ports in the handling of Canadian wheat, with receipts by water from Port Arthur and Fort William of 96·5 million bushels. The export of wheat through Vancouver, including a small shipment to the United States, was 17·8 million bushels, as compared with 7·8 million in the previous crop year.

The wheat used by the milling companies of the western division for the manufacture of flour amounted to about 24 million bushels, of which 20·1 million bushels were ground into flour for domestic consumption. The seed requirements were estimated at 38 million bushels, and the stocks at the end of the crop year were 5·4 million bushels.

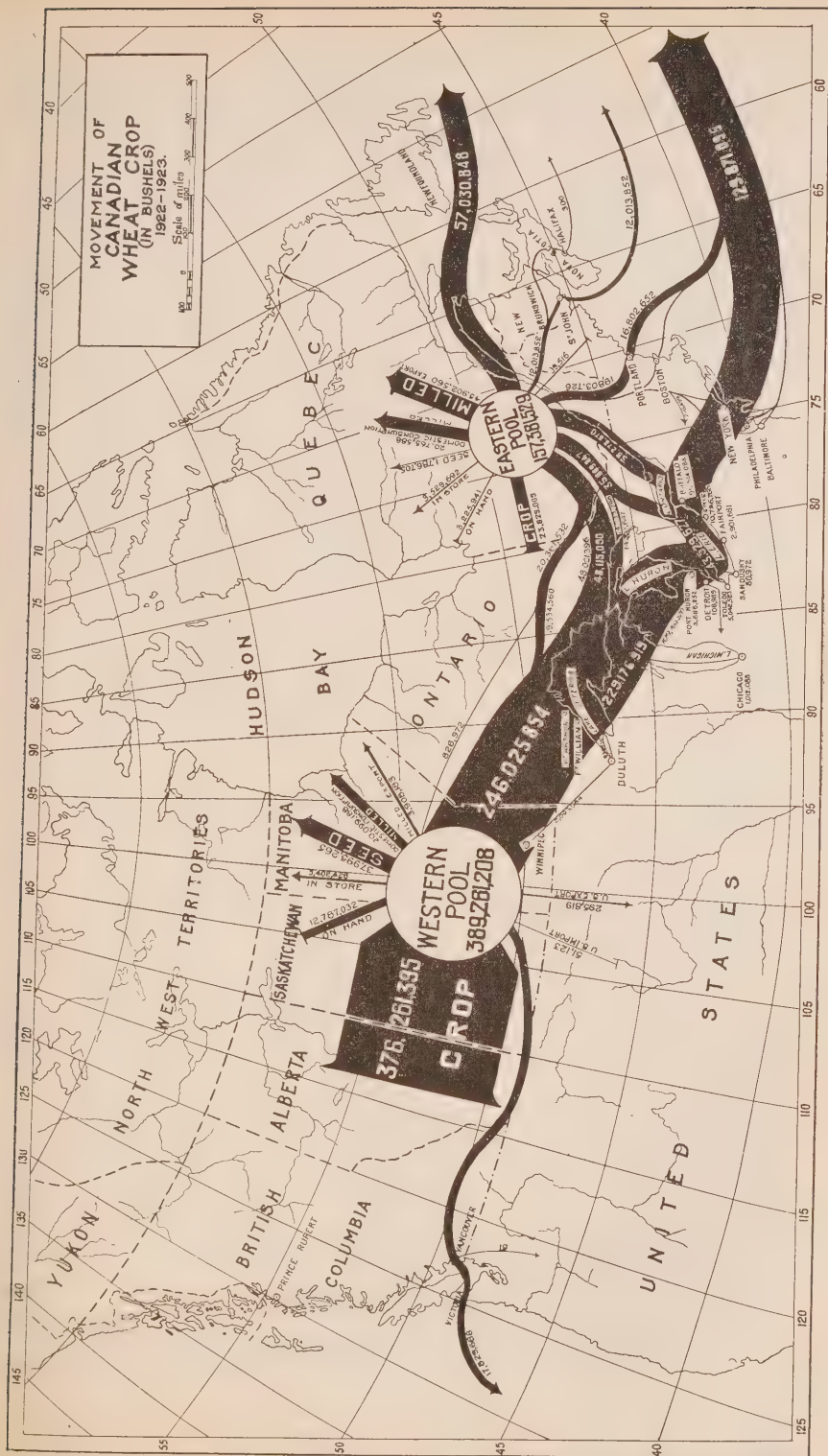
The eastern pool received during the crop year not only the eastern crop, estimated at 23·5 million bushels, but also shipments from the West aggregating 130·4 million bushels. The quantity on hand at the beginning of the crop year was 3·2 million bushels, making, with a comparatively small importation from the United States, a total stock entering the eastern pool of 157·4 million bushels. The distribution included 3·5 million bushels carried over in store into the following year, 57 million bushels exported from the St. Lawrence ports, and 12 million bushels shipped through the winter port of St. John. In addition, 19·8 million bushels were cleared for export to other countries *via* the United States Atlantic ports. The chief of these ports concerned with the movement of Canadian grain from both divisions were New York, with shipments of 47·8 million bushels, Philadelphia, with 26·1 million and Portland, with 18·4 million.¹

Total exports from Canada to the United States for consumption amounted to 12·9 million bushels, to the United Kingdom 174 million bushels, to other countries 42·8 million bushels; 86·7 million bushels were shipped *via* Canadian ports and 129·9 million bushels were shipped *via* United States ports. Total exports of wheat from Canada during the crop year amounted to 229·7 million bushels.

Table 29 shows for the license years 1919 to 1924 the number of railway stations at which elevators are placed, the number of elevators and warehouses and their total storage capacity, the figures being given by provinces for the country elevators of the West, and by description of elevators for the rest of the country. Tables 30 and 31 give statistics of the inspection of grain for the fiscal years 1922, 1923 and 1924 and for 1920-24, and Tables 32 and 33 of the shipment of grain by vessel and rail for 1922 and 1923.

Tables 34 and 35 deal with the Canadian grain handled in recent years at public elevators in the East.

¹For further information see the Report on the Grain Trade of Canada, issued by the Internal Trade Branch of the Dominion Bureau of Statistics.



28.—Summary of the Distribution of Grain in Canada during the crop year ended Aug. 31, 1923.

Items.	Wheat.	Oats.	Barley.	Flax.	Rye.
	Bush.	Bush.	Bush.	Bush.	Bush.
1. On hand Sept. 1, 1922—					
In farmers' hands.....	2,360,300	11,613,000	645,200	6,300	78,500
In public elevators in the East.....	1,683,700	1,089,189	92,339	14,484	8,160
In country elevators, W. Division.....	4,657,202	1,461,009	768,951	89,620	753,030
In interior elevators, W. Division.....	88,082	49,257	5,999	171	2,917
In public terminals, W. Division.....	2,839,631	486,715	273,100	157,756	609,171
In private terminals, W. Division.....	1,755,722	336,207	124,878	32,997	176,691
In flour mills.....	2,628,336	238,196	22,548	—	1,219
Total.....	16,012,973	15,273,573	1,933,015	301,328	1,629,688
2. Crop 1922.....	399,786,400	491,239,000	71,865,300	5,008,500	32,373,400
3. Shipped in—					
From U.S.A. and other countries.....	417,406	413,872	280	760,844	1,199
4. Total annual stock (sum 1, 2 and 3)...	416,216,779	506,926,445	73,798,595	6,070,672	34,004,287
5. Shipped out—					
To U.S.A.....	12,936,048	250,759	936,945	2,320,329	438,225
To United Kingdom via Canadian and U.S.A. ports.....	174,011,494	18,244,175	11,428,349	1,319	7,896,653
To other countries via Canadian and U.S.A. ports.....	42,734,272	5,066,233	1,476,311	—	1,840,564
Total.....	229,681,814	23,561,170	13,841,605	2,321,648	10,175,442
6. Milled consumption.....	40,864,776	7,030,666	856,859	1,942,206	38,500
Milled export.....	49,810,743	2,343,651	—	—	2,856
7. Total disposed of commercially (sum 5 and 6).....	320,357,333	32,935,487	14,698,464	4,263,854	10,216,798
8. Used for seed.....	39,782,265	34,324,602	5,630,126	316,369	2,178,830
9. In store Aug. 31, 1923—					
In farmers' hands.....	1,440,900	16,788,000	1,176,900	2,800	110,200
In public elevators in the East.....	1,059,271	1,468,696	930,457	—	1,226,236
In country elevators, W. Division.....	2,376,734	1,418,017	434,658	38,416	288,574
In interior terminals, W. Division.....	13,821	177,705	1,604	1,462	8,740
In Vancouver Harbour Commission's Elevator.....	115,065	4,194	—	—	—
In public terminals, W. Division.....	1,043,509	210,807	199,658	109,420	797,563
In private terminals, W. Division.....	442,516	304,384	104,737	40,447	197,435
In flour mills.....	2,440,301	607,014	32,314	—	1,980
Total.....	8,932,118	20,978,817	2,880,328	192,545	2,630,728
10. Total accounted for (sum 7, 8 and 9).....	369,071,716	88,238,906	23,208,918	4,772,768	15,026,356
11. Loss in cleaning.....	8,995,194	540,367	948,621	587,497	602,145
12. Grain not merchantable.....	9,799,000	38,670,000	2,155,959	150,255	971,202
13. Balance—fed on farms or otherwise consumed in and moved out of Canada through other channels.....	28,350,869	379,477,176	47,485,097	560,152	17,404,584
14. Total (sum 10 to 13).....	416,216,779	506,926,445	73,798,595	6,070,672	34,004,287
15. Amount inspected.....	298,694,324	50,769,145	19,091,135	3,631,500	12,148,713
16. Per cent of crop inspected.....	74.71	10.32	26.56	72.50	37.52
17. Per cent of commercial grain inspected.....	80.93	57.56	82.28	—	80.85
18. Commercial grain from season's crop (9 + 7—1—3).....	312,859,072	38,185,266	15,639,013	—	11,216,639
19. Per cent of crop for commercial grain (per cent line 18 of line 2).....	78.25	7.77	21.76	—	34.64
20. Value of crop.....	\$ 339,419,000	185,455,000	33,335,300	8,638,900	18,703,200

29.—Number and Storage Capacity of Canadian Grain Elevators in the license years 1919-1924.

COUNTRY ELEVATORS IN MANITOBA.

Years.	Sta- tions.	Eleva- tors.	Ware- houses.	Capacity.	Years.	Sta- tions.	Eleva- tors.	Ware- houses.	Capacity.
	No.	No.	No.	Bushels.		No.	No.	No.	Bushels.
1919.....	371	702	-	22,926,300	1922.....	386	701	-	22,159,100
1920.....	379	695	-	23,024,500	1923.....	385	696	-	21,970,100
1921.....	380	692	-	22,073,600	1924.....	387	684	-	21,353,600

COUNTRY ELEVATORS IN SASKATCHEWAN.

1919.....	753	2,160	-	67,331,664	1922.....	782	2,224	-	70,181,320
1920.....	753	2,165	-	68,058,470	1923.....	797	2,304	-	72,542,320
1921.....	767	2,184	-	68,867,020	1924.....	829	2,433	-	76,199,020

COUNTRY ELEVATORS IN ALBERTA.

1919.....	314	830	-	32,148,000	1922.....	357	915	-	36,092,000
1920.....	334	853	-	33,462,000	1923.....	370	936	-	36,854,000
1921.....	350	897	-	35,716,000	1924.....	378	948	-	36,262,000

COUNTRY ELEVATORS IN BRITISH COLUMBIA.

1919.....	8	13	-	613,000	1922.....	7	12	-	541,000
1920.....	7	13	-	561,000	1923.....	5	12	-	541,000
1921.....	7	12	-	517,000	1924.....	5	5	-	104,000

ONTARIO COUNTRY AND MILLING ELEVATORS.

1919.....	2	4	-	1,840,000	1922.....	2	4	-	1,840,000
1920.....	2	4	-	1,840,000	1923.....	2	4	-	1,840,000
1921.....	2	4	-	1,840,000	1924.....	1	1	-	40,000

TOTAL OF COUNTRY ELEVATORS.

1919.....	1,446	3,705	-	123,018,964	1922.....	1,534	3,856	-	130,813,420
1920.....	1,475	3,730	-	126,945,970	1923.....	1,559	3,952	-	133,747,420
1921.....	1,506	3,789	-	129,013,620	1924.....	1,600	4,071	-	133,958,620

INTERIOR TERMINAL ELEVATORS.

1918-19...	5	5	-	11,500,000	1921-22....	5	5	-	11,500,000
1919-20...	5	5	-	11,500,000	1922-23....	3	4	-	10,500,000
1920-21...	5	5	-	11,500,000	1923-24....	5	5	-	11,500,000

INTERIOR PRIVATE ELEVATORS.

1918-19...	5	5	-	460,000	1921-22....	4	6	-	605,000
1919-20...	5	5	-	485,000	1922-23....	2 (5)	7	-	1,620,000
1920-21...	5	6	-	585,000	1923-24....	1 (11)	24	-	4,766,000

BRITISH COLUMBIA TERMINAL AND PUBLIC ELEVATORS

1918-19...	(1)	2	-	1,266,000	1921-22....	(1)	1	-	1,250,000
1919-20...	1	2	-	1,266,000	1922-23....	(1)	1	-	1,250,000
1920-21...	1	1	-	1,250,000	1923-24....	(1)	1	-	1,250,000

NOTE.—The statistics of Canadian elevators for 1901 to 1918 are given in the 1921 Year Book, pp.507-509. The figures in parentheses are not included in the total.

29.—Number and Storage Capacity of Canadian Grain Elevators in the license years 1919-1924—concluded.

BRITISH COLUMBIA PRIVATE ELEVATORS.

Years.	Stations.	Elevators.	Ware-houses.	Capacity.	Years.	Stations.	Elevators.	Ware-houses.	Capacity.
	No.	No.	No.	Bushels.		No.	No.	No.	Bushels.
1923-24...	(2)	6	-	410,000					

ONTARIO TERMINAL ELEVATORS.

1919 ¹	4	31	-	51,405,000	1922 ¹	2	32	-	53,785,000
1920 ¹	4	30	-	52,255,000	1923 ¹	2	32	-	56,810,000
1921 ¹	4	30	-	54,685,000	1924 ¹	2	38	-	65,110,000

PUBLIC ELEVATORS.

1919.....	17	25	-	31,790,000	1922.....	14	24	-	34,180,000
1920.....	17	25	-	33,805,000	1923.....	14	24	-	34,180,000
1921.....	17	24	-	34,180,000	1924.....	14	24	-	34,200,000

GRAND TOTAL OF CANADIAN ELEVATORS.

1919.....	1,480	3,777	-	221,279,964 ²	1922.....	1,559	3,924	-	231,633,420
1920.....	1,507	3,797	-	226,256,970	1923.....	1,578	4,020	-	238,107,420
1921.....	1,538	3,855	-	231,213,620	1924.....	1,620	4,169	-	251,194,620

¹ Including private elevators. ² The totals for 1919 include 1 Ontario country elevator, with a capacity of 40,000 bushels.

NOTE.—The average capacity of railway cars for the carriage of grain is for wheat 1,300, oats 2,000, barley 1,475, flaxseed 1,125, and rye 1,350 bushels. Detailed statistics of elevators for the years 1901 to 1918 are given in the 1921 Year Book, pp. 537-539.

30.—Quantities of Grain Inspected during the fiscal years ended Mar. 31, 1922-1924.

Grades of Grain.	1922.		1923.		1924.	
	Eastern Division.	Western Division.	Eastern Division.	Western Division.	Eastern Division.	Western Division.
	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.
Wheat, Spring—						
Man. No. 1 Hard...	-	2,757,825	-	1,031,125	-	78,422
Northern No. 1.....	-	66,725,850	-	180,960,225	-	145,956,792
“ No. 2.....	-	46,909,800	-	48,569,175	-	87,772,266
“ No. 3.....	-	53,806,275	-	30,674,425	-	74,713,602
“ No. 4.....	-	18,465,825	-	4,512,525	-	16,884,672
“ No. 5.....	-	4,944,450	-	1,302,725	-	3,839,920
“ No. 6.....	-	1,204,875	-	655,350	-	1,370,129
Feed.....	-	295,800	-	188,425	-	2,099,937
Rejected Smutty—						
No. 1.....	-	716,550	-	915,500	-	1,324,708
No grade.....	-	11,965,875	-	10,269,150	-	4,041,524
Condemned.....	-	24,225	-	54,550	-	36,665
No established grade.....	-	16,575	-	16,825	-	123,926
Commercial grades—						
No. 1.....	209,588	-	215,968	5,200	38,446	18,404
No. 2.....	45,816	-	11,680	1,300	-	13,244
No. 1 Spring.....	1,100	-	-	-	-	-
No. 2 “.....	31,480	-	5,063	-	-	-
No. 3 “.....	6,950	-	3,574	-	-	-
Rejected.....	3,000	-	-	-	-	-
No grade.....	1,000	-	1,000	-	-	-
Goose No. 1.....	-	-	-	-	-	-
“ No. 2.....	1,000	-	1,133	-	1,056	-
“ No. 3.....	2,000	-	-	-	-	-
Rejected.....	3,000	-	-	-	-	-

**30.—Quantities of Grain Inspected during the fiscal years ended Mar. 31,
1922-1924—con.**

Grades of Grain.	1922.		1923.		1924.	
	Eastern Division.	Western Division.	Eastern Division.	Western Division.	Eastern Division.	Western Division.
	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.
Wheat, Spring—concluded—						
Rejected.....	—	2,768,025	—	6,363,700	—	7,773,766
No. 1 Durum.....	—	67,575	—	166,225	—	35,461
No. 2 ".....	—	276,675	—	977,850	—	623,173
No. 3 ".....	—	322,575	—	1,113,625	—	1,294,164
No. 4 ".....	—	24,225	—	28,500	—	164,759
No. 5 ".....	—	—	—	5,200	—	17,252
No. 6 ".....	—	—	—	—	—	2,594
Rejected.....	—	6,375	—	383,475	—	96,334
Condemned Durum..	—	—	—	—	—	1,297
Durum and Spring..	—	53,550	—	168,600	—	132,517
Red Durum.....	—	28,050	—	163,675	—	48,507
U. S. Durum—						
Amber No. 2.....	1,891,248	—	5,898,710	—	8,350,865	—
Amber No. 3.....	581,484	—	—	—	—	—
Mixed No. 2.....	2,715,349	—	6,798,461	—	8,749,795	—
Durum No. 2.....	—	—	2,264,899	—	878,000	—
No. 2 Mixed D						
Wheat.....	1,024,191	—	—	—	—	—
Dark No. 2 Nor....	70,718	—	—	—	—	—
No. 4 Special.....	—	—	—	—	—	4,294,336
No. 5 ".....	—	—	—	—	—	2,500,245
No. 6 ".....	—	—	—	—	—	2,218,860
No grade Durum...	—	—	—	296,400	—	15,821
Smutty—Wheat and Ragweed.....	—	12,750	—	—	—	5,266
Spring and Durum..	—	105,825	—	180,050	—	177,983
Wheat and Rye.....	—	30,600	—	110,450	—	90,638
Rejected and..	—	—	—	—	—	—
Sprouted.....	—	9,544,650	—	1,086,700	—	—
Durum and Barley..	—	1,275	—	13,000	—	39,502
Smutty Durum.....	—	—	—	2,600	—	—
Wheat and Oats....	—	—	—	8,975	—	7,881
Wheat and Barley..	—	—	—	3,900	—	11,849
Durum and Oats....	—	—	—	5,200	—	—
Wheat and Wild Oats	—	—	—	9,100	—	31,408
Wheat, Barley and Oats.....	—	—	—	1,300	—	—
Wheat and Gravel..	—	—	—	1,300	—	—
Durum, Spring and Rye.....	—	—	—	7,800	—	1,300
Durum, Spring and Oats.....	—	—	—	1,300	—	—
Wheat and Wild Oats, etc.....	—	—	—	—	—	1,297
Wheat and Barley, etc.....	—	—	—	—	—	1,297
Durum, Spring, etc.	—	—	—	—	—	1,297
Durum, Barley, etc.	—	—	—	—	—	1,297
Durum and Rye....	—	—	—	—	—	1,274
Durum, Spring and Barley.....	—	—	—	—	—	1,300
Total Spring Wheat	6,587,924	221,076,075	15,200,488	290,255,425	18,018,162	357,866,886
Wheat, Winter—						
U. S. Hard Winter—						
No. 1.....	4,061,611	—	1,954,773	—	—	—
No. 2.....	8,828,266	—	13,243,535	—	7,772,467	—
No. 3.....	159,424	—	—	—	—	—
No. 2 Red Hard						
Winter.....	530,067	—	—	—	—	—
White Winter—						
No. 1.....	3,455	—	—	3,900	1,110	—
No. 2.....	18,236	—	67,626	5,200	80,514	—
No. 3.....	4,000	—	8,510	—	1,100	—
No. 1 Winter.....	—	15,300	—	—	—	—
No. 2 ".....	—	3,825	—	—	—	—
Rejected.....	12,500	—	4,550	—	2,361	—
No grade.....	—	—	1,300	—	—	—

**30.—Quantities of Grain Inspected during the fiscal years ended Mar. 31,
1922-1924—con.**

Grades of Grain.	1922.		1923.		1924.	
	Eastern Division.	Western Division.	Eastern Division.	Western Division.	Eastern Division.	Western Division.
Wheat, Winter—con.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.
Mixed Winter—						
No. 1.....	—	—	—	—	1,400	—
No. 2.....	103,330	—	348,621	—	212,858	—
No. 3.....	56,303	—	181,784	—	66,138	—
No. 4.....	—	—	—	—	—	—
No grade.....	6,245	—	31,949	—	1,000	—
Rejected.....	120,883	—	71,977	—	10,664	—
U.S. No. 1.....	—	—	—	—	—	—
Alberta Red Winter—						
No. 1.....	—	22,950	—	38,900	8,685	10,412
No. 2.....	16,918	10,200	272,443	18,100	393,765	22,237
No. 3.....	27,600	2,550	177,964	1,300	14,559	2,681
No. 4.....	—	1,275	—	—	—	—
Rejected.....	—	—	47,173	—	—	—
No grade.....	—	—	4,788	—	1,380	—
U.S. No. 1 Red Winter.....	—	—	—	—	—	—
U.S. No. 2 Red Winter.....	5,012,449	—	2,503,759	—	—	—
Rejected.....	36,040	—	—	—	—	—
Smutty.....	—	—	—	—	—	—
No grade.....	—	—	—	—	—	—
Alberta White Winter—						
No. 2.....	—	—	—	—	—	—
No. 3.....	—	—	—	—	—	—
No. 4.....	—	—	—	—	—	—
Rejected.....	—	—	—	—	—	—
No grade.....	—	—	—	—	—	—
Commercial grades—						
No. 1 W.W.....	56,862	—	—	—	—	—
No. 2 W.W.....	1,780	—	—	—	—	—
No. 1 M.W.....	47,340	—	—	—	9,220	—
No. 2 M.W.....	—	—	—	—	2,000	—
No. 1 R.W.....	—	—	—	—	1,100	—
No. 2 R.W.....	1,200	—	—	—	—	—
No grade, tough.....	90	—	—	—	—	—
Total Winter Wheat	19,104,599	56,100	18,920,752	67,400	8,580,321	35,330
Total Spring and Winter Wheat	25,692,523	221,132,175	34,121,240	290,322,825	26,598,483	357,902,216
Indian Corn—						
No. 1 American.....	1,246,709	—	1,071	—	—	—
No. 2 American.....	50,437,158	—	33,405,523	—	2,606,159	—
No. 3 American.....	137,778	—	118,403	—	73,653	—
No. 4 American.....	49,190	—	29,531	—	68,078	—
No. 5.....	—	—	—	—	3,534	—
No. 6.....	—	—	1,400	—	—	—
Rejected.....	5,200	—	15,597	—	24,424	—
No grade.....	—	—	4,600	—	36,097	—
Condemned.....	—	—	—	—	1,400	—
American, other.....	11,152	—	—	—	—	—
Argentine corn.....	4,284	—	—	—	—	—
No. 2 Can. Yellow.....	—	—	3,400	—	—	—
No. 3 Can. Yellow.....	—	—	6,482	—	4,570	—
No. 4 Can. Yellow.....	—	—	—	—	8,227	—
No. 2 Mixed.....	—	—	—	—	3,212	—
No. 3 Mixed.....	—	—	4,308	—	—	—
No. 4 Mixed.....	—	—	—	—	1,200	—
Rejected.....	—	—	2,140	—	—	—
Total Corn	51,891,471	5,000	33,592,455	15,000	2,830,554	8,000
Oats—						
Extra No. 1.....	—	—	—	—	—	2,074
No. 1.....	—	90,000	—	86,000	—	301,053
No. 2.....	6,980	15,334,000	298,982	9,930,000	35,950	19,925,428
No. 3.....	52,193	14,934,000	728,255	15,464,000	168,213	18,894,911
No. 4.....	30,350	—	424,642	—	141,803	—
Feed extra No. 1.....	—	5,508,000	—	1,520,000	—	3,119,583
Feed No. 1.....	—	6,290,000	—	7,256,000	—	10,674,516

**30.—Quantities of Grain Inspected during the fiscal years ended Mar. 31,
1922-1924—con.**

Grades of Grain.	1922.		1923.		1924.	
	Eastern Division.	Western Division.	Eastern Division.	Western Division.	Eastern Division.	Western Division.
Oats—concluded.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.
Feed No. 2.....	-	4,268,000	-	5,732,000	-	8,510,415
Rejected.....	182,850	592,000	216,088	618,000	36,050	1,788,509
No grade.....	-	22,582,000	168,539	10,332,000	96,500	2,110,098
Condemned.....	-	44,000	-	8,000	-	10,273
Oats and W. Oats...	-	-	-	22,000	-	270,302
Oats and Rye.....	-	-	-	10,000	-	4,063
Oats and Barley, etc.....	-	-	-	-	-	4,080
Oats and Barley...	-	-	-	-	-	4,123
W. Oats.....	-	-	-	16,000	-	-
B. Oats.....	-	-	-	12,000	-	-
Oats and Wheat.....	-	-	-	8,000	-	20,479
Mixed.....	-	886,000	-	1,146,000	-	1,073,098
Speltz.....	-	-	-	3,000	-	3,000
U.S. No. 2.....	-	-	951,266	-	12,604	-
U.S. No. 3.....	-	-	1,500	-	-	-
U.S. No. 3 clipped..	-	-	-	-	-	-
Total Oats.....	272,373	70,528,000	2,789,272	52,163,000	491,120	66,713,005
Buckwheat—						
No. 2.....	289,878	-	454,785	-	124,761	-
No. 3.....	17,727	-	5,989	-	14,331	-
No grade.....	9,170	-	13,632	-	2,128	-
Rejected.....	15,750	-	5,329	-	-	-
Total Buckwheat..	332,525	-	479,735	11,000¹	141,220	10,000¹
Barley—						
No. 1.....	-	-	1,546	-	-	-
No. 2.....	-	-	11,690	-	2,250	-
No. 3, extra.....	4,370	58,800	116,092	20,275	32,216	13,242
No. 3.....	151,509	7,051,800	143,482	8,838,150	86,968	7,785,839
No. 4.....	96,365	3,101,000	71,348	3,159,400	16,875	5,372,204
Feed.....	-	624,400	-	915,250	-	2,686,089
Rejected.....	255,527	786,800	40,976	1,099,550	3,050	2,050,809
No grade.....	-	3,252,200	1,250	4,055,450	-	1,414,454
Condemned.....	-	2,800	-	-	-	-
Smutty.....	-	1,400	-	-	-	1,454
Barley and Rye.....	-	1,400	-	2,875	-	2,962
Barley, Wheat, etc..	-	-	-	-	-	1,421
Barley and W. Oats..	-	-	-	72,275	-	237,763
Barley and Durum...	-	-	-	1,475	-	-
Barley and Wheat...	-	-	-	2,950	-	11,710
Millet.....	-	-	-	1,475	-	1,475
U.S. No. 1.....	-	-	-	-	-	-
U.S. No. 3.....	51,701	-	-	-	-	-
Total Barley.....	559,472	14,880,600	386,384	18,170,125	141,359	19,579,422
Rye—						
No. 1 C.W.....	-	-	-	2,608,050	-	217,491
No. 2 C.W.....	-	-	-	6,711,075	23,908	4,765,393
No. 3.....	-	-	-	543,375	1,387	788,851
Rejected.....	-	-	-	762,900	-	899,233
No grade.....	-	-	-	1,007,325	-	613,382
Feed.....	-	-	-	4,050	-	-
Rejected Wheat and Barley.....	-	-	-	2,700	-	-
Rye and Wheat.....	-	-	-	165,750	-	173,094
Rejected Oats and Wheat.....	-	-	-	1,350	-	-
Rye and Oats.....	-	-	-	20,175	-	9,098
Rye and Barley.....	-	-	-	4,050	-	17,328
Rye and W. Oats...	-	-	-	1,350	-	14,345
Rye, all grades.....	221,401	3,966,525	97,740	11,832,150	-	13,341
U.S. Rye.....	6,845,117	-	14,828,486	-	6,743,912	-
Total Rye.....	-	-	-	-	6,769,207	7,511,556

¹No grade given.

**30.—Quantities of Grain Inspected during the fiscal years ended Mar. 31,
1922-1924—concluded.**

Grades of Grain.	1922.		1923.		1924.	
	Eastern Division.	Western Division.	Eastern Division.	Western Division.	Eastern Division.	Western Division.
	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.
Flaxseed—						
No. 1 N.W.C.....	—	2,993,100	—	3,056,850	—	3,715,700
No. 2 C.W.....	—	566,500	—	518,550	—	457,779
No. 3 C.W.....	—	78,100	—	59,100	—	140,942
No. grade.....	—	162,600	—	115,325	—	21,822
Rejected.....	—	28,600	—	29,850	—	39,600
Condemned.....	—	1,100	—	2,225	—	—
Fake Flaxseed.....	—	2,200	—	—	—	—
Flaxseed and buck-wheat.....	—	—	—	1,100	—	—
Total Flaxseed.....	—	3,832,200	—	3,783,000	—	4,378,842
Peas, all grades.....	10,781	—	13,164	—	27,082	—
Screenings.....	—	484,000	—	215,000	—	277,000

31.—Quantities of Grain Inspected during the fiscal years ended March 31, 1920-1924.

Grains.	Eastern Division.					Western Division.	Grand Total.
	Kingston.	Peterboro.	Toronto.	Montreal.	Total.		
	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.
Wheat.....1920	—	—	403,135	233,778	636,913	120,791,125	121,428,038
1921	—	—	2,087,539	10,121,433	12,208,972	185,338,750	197,547,722
1922	—	—	602,774	25,089,749	25,692,523	221,132,175	246,824,698
1923	—	—	1,438,116	32,683,124	34,121,240	290,322,825	324,444,065
1924	—	—	839,756	25,758,727	26,598,483	357,902,216	384,500,699
Corn.....1920	—	—	—	472,408	472,408	7,000	479,408
1921	—	—	—	314,820	314,820	2,000	316,820
1922	—	—	5,355	51,886,116	51,891,471	5,000	51,896,471
1923	—	—	16,330	33,576,125	33,592,455	15,000	33,607,455
1924	—	—	24,959	2,805,595	2,830,554	8,000	2,838,554
Oats.....1920	—	—	344,289	332,987	677,276	59,379,450	60,056,726
1921	—	—	643,412	1,783,041	2,426,453	65,662,000	68,088,453
1922	—	—	241,140	31,233	272,373	70,528,000	70,800,373
1923	—	—	453,398	2,335,874	2,789,272	52,163,000	54,952,272
1924	—	—	154,113	337,007	491,120	66,713,005	67,204,125
Buck-wheat...1920	—	—	82,863	38,532	121,395	2,000	123,395
1921	—	—	145,506	27,762	173,268	—	173,268
1922	—	—	262,262	70,263	332,525	—	332,525
1923	—	—	333,575	146,160	479,735	11,000	490,735
1924	—	—	125,540	15,680	141,220	10,000	151,220
Barley.....1920	—	—	557,842	851,943	1,409,785	15,643,800	17,053,585
1921	—	—	237,868	605,588	843,456	13,655,400	14,508,856
1922	—	—	189,040	370,432	559,472	14,880,600	15,440,072
1923	—	—	127,337	259,047	386,384	18,170,125	18,556,509
1924	—	—	34,659	106,700	141,359	19,579,422	19,720,781
Rye.....1920	—	—	163,395	929,007	1,092,402	2,172,350	3,264,752
1921	—	—	333,318	5,627,016	5,960,334	2,967,500	8,927,834
1922	—	—	97,431	6,969,087	7,066,518	3,966,525	11,033,043
1923	—	—	87,090	14,839,136	14,926,226	11,832,150	26,758,376
1924	—	—	14,528	6,754,679	6,769,207	7,511,556	14,280,763
Flaxseed...1920	—	—	—	—	—	2,335,000	2,335,000
1921	—	—	—	—	—	5,036,375	5,036,375
1922	—	—	—	—	—	3,832,400	3,832,400
1923	—	—	—	—	—	3,783,000	3,783,000
1924	—	—	—	—	—	4,378,842	4,378,842
Peas.....1920	—	—	19,072	10,816	29,888	—	29,888
1921	—	—	2,000	1,000	3,000	—	3,000
1922	—	—	10,781	—	10,781	—	10,781
1923	—	—	13,164	—	13,164	—	13,164
1924	—	—	27,082	—	27,082	—	27,082

31.—Quantities of Grain Inspected during the fiscal years ended March 31, 1920-1924—concluded.

Grains.	Eastern Division.					Western Division.	Grand Total.
	Kingston.	Peterboro.	Toronto.	Montreal.	Total.		
	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.
Screenings. 1920	—	—	—	—	—	669,000	669,000
1921	—	—	—	—	—	455,000	455,000
1922	—	—	—	—	—	484,000	484,000
1923	—	—	—	—	—	215,000	215,000
1924	—	—	—	—	—	277,000	277,000
Total 1920	—	—	1,570,596	2,869,741	4,440,067	200,999,725	205,439,792
" 1921	—	—	3,449,643	18,489,660	21,939,303	273,127,025	295,057,328
" 1922	—	—	1,408,783	84,416,889	85,825,663	314,828,700	490,654,363
" 1923	—	—	2,469,016	83,839,466	86,308,476	376,512,100	462,820,576
" 1924	—	—	1,220,637	35,778,388	36,999,025	456,380,041	493,379,066

32.—Shipments of Grain by Vessels from Fort William and Port Arthur for the navigation seasons 1922 and 1923.

Kinds of Grain.	1922.			1923.		
	To Canadian ports.	To American ports.	Total shipments.	To Canadian ports.	To American ports.	Total shipments.
	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.
Wheat.....	96,729,810	128,651,648	225,381,458	119,187,192	125,194,177	244,577,669 ¹
Oats.....	18,039,045	7,709,373	25,748,418	24,229,703	4,284,999	28,514,702
Barley.....	7,256,764	5,611,304	12,868,068	9,893,575	4,291,625	14,185,200
Flaxseed.....	920,855	1,915,951	2,836,806	598,262	2,535,817	3,134,079
Rye.....	924,080	6,337,769	7,261,849	2,140,952	4,318,768	6,459,720
Total.....	123,870,554	150,226,045	274,096,599	156,049,684	140,625,386	296,675,070¹
Mixed grains..... lb.	28,896,900	241,727,419	270,624,319	89,161,694	91,146,942	180,308,636
Screenings..... ton.	16,673	74,840	91,513	52,766	82,377	135,143

¹ Includes 196,300 bush. wheat shipped direct to Europe.

33.—Shipments of Grain by Vessels and all-rail route from Fort William and Port Arthur for the crop years ended Aug. 31, 1922 and 1923.

Kinds of Grain.	1921-22.			1922-23.		
	Vessels.	Rail.	Total.	Vessels.	Rail.	Total.
	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.
Wheat—						
No. 1 Hard.....	920,551	82,103	1,002,654	194,332	15,082	209,415
No. 1 Northern.....	63,581,548	835,806	64,417,354	161,163,188	10,403,003	171,566,191
No. 2 Northern.....	38,228,756	2,810,086	41,038,842	42,246,139	2,654,096	44,900,235
No. 3 Northern.....	51,390,491	5,015,088	56,405,579	17,452,613	3,555,095	21,007,707
Sundry grades.....	22,000,650	3,687,700	25,688,350	8,761,972	1,796,027	10,557,999
Total Wheat.....	176,121,996	12,430,783	188,552,779	229,818,244	18,423,303	248,241,547
Oats.....	32,852,849	8,204,508	41,057,357	20,051,015	6,235,265	26,286,280
Barley.....	10,930,468	1,139,635	12,070,103	13,983,057	1,823,377	15,806,434
Flaxseed.....	3,296,542	316,560	3,613,102	2,007,798	680,830	2,688,628
Rye.....	4,839,260	31,516	4,870,776	11,466,293	11,674	11,477,967
Total Grain.....	228,041,115	22,123,002	250,164,117	277,326,407	27,174,449	304,500,856
Mixed grains.....	lb.	lb.	lb.	lb.	lb.	lb.
	8,961,608	4,320,494	13,282,102	16,408,720	10,604,060	27,012,780

34.—Canadian Grain handled at Public Elevators in the East, by crop years ended Aug. 31, 1918-1923.

Years.	Wheat.	Oats.	Corn.	Barley.	Flax-seed.	Rye.	Mixed or other Grains.	Total Grain.	Mixed Grains.
RECEIPTS.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.
1917-1918...	110,454,320	40,624,672	94,592	9,969,828	705,910	—	111,111	161,960,433	—
1918-1919...	133,693,991	10,180,477	27,909	16,552,857	807,145	391,273	—	161,653,652	—
1919-1920...	141,641,693	17,091,582	—	12,315,737	225,152	1,170,346	—	172,444,510	—
1920-1921...	99,222,288	56,920,476	—	15,122,141	933,160	1,322,315	—	173,520,380	445,796
1921-1922...	120,870,258	50,187,467	—	16,365,929	1,170,635	2,270,964	—	190,865,253	—
1922-1923...	195,912,085	32,097,720	—	14,790,852	501,979	3,418,010	—	246,720,646	—
SHIPMENTS.									
1917-1918...	107,981,532	37,729,008	66,682	9,530,930	685,372	—	88,277	156,081,801	—
1918-1919...	131,576,569	9,142,955	27,909	15,169,320	807,145	391,272	—	157,115,170	—
1919-1920...	137,325,174	16,851,459	—	11,978,427	203,521	1,170,340	—	167,528,921	—
1920-1921...	98,073,242	52,455,177	—	14,707,981	870,279	1,298,940	—	167,405,619	—
1921-1922...	119,186,498	49,098,234	—	16,273,586	1,156,145	2,262,807	—	187,977,270	—
1922-1923...	194,426,412	30,625,863	—	13,832,147	459,529	2,191,775	—	241,565,726	—

35.—Canadian Grain handled in Public Elevators in the East, by classes of ports during the crop year ended Aug. 31, 1923.

Ports.	Wheat.	Oats.	Barley.	Flaxseed.	Rye.	Total.
	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.
Georgian Bay Ports—						
On Hand.....	460,083	115,814	—	—	—	575,897
Receipts—Water.....	62,255,194	6,430,629	2,837,577	259,004	1,686,312	73,468,716
Total.....	62,715,277	6,546,443	2,837,577	259,004	1,686,312	74,044,613
Shipments—Rail.....	62,316,737	6,463,749	2,775,311	259,005	1,060,817	72,875,619
In Store.....	398,503	82,679	62,258	—	625,493	1,168,933
Lower Lake Ports—						
On Hand.....	171,225	386,383	—	—	—	557,608
Receipts—Rail.....	30,406	24,972	—	—	—	55,378
Water.....	43,529,627	6,454,089	3,946,474	—	691,855	54,622,045
Total.....	43,731,258	6,865,444	3,946,474	—	691,855	55,235,031
Shipments—Rail.....	12,707,328	1,277,590	361,744	—	40,819	14,387,481
Water.....	30,875,170	5,517,154	3,403,216	—	591,755	40,387,295
In Store.....	148,748	70,678	181,514	—	59,281	460,221
St. Lawrence Ports—						
On Hand.....	1,051,291	586,992	92,339	14,484	8,160	1,753,266
Receipts—Rail.....	36,571,539	6,715,205	2,327,046	12,451	89,772	45,716,013
Water.....	39,518,319	8,677,504	4,677,801	216,040	941,911	54,031,575
Total.....	77,141,149	15,979,701	7,097,186	242,975	1,039,843	101,500,854
Shipments—Rail.....	8,094,498	3,970,229	423,677	230,524	42,151	12,761,079
Water.....	68,108,280	10,691,033	5,961,817	—	456,233	85,217,363
In Store.....	938,371	1,318,414	711,686	12,451	541,462	3,522,384
Seaboard Ports—						
On Hand.....	1,101	—	—	—	—	1,101
Receipts—Rail.....	12,323,300	2,706,132	909,615	—	—	15,939,047
Total.....	12,324,401	2,706,132	909,615	—	—	15,940,148
Shipments—Water.....	12,313,408	2,695,455	906,382	—	—	15,915,245
Rail.....	10,991	10,653	—	—	—	21,644
In Store.....	—	—	3,229	—	—	3,229

3.—Marketing of Live Stock and Animal Products.

The estimated value of farm live stock in Canada in 1923 was about \$650,000,000 or three-quarters of the value of field crops grown during the year. In gross value of product the slaughtering and meat-packing industry, which is dependent chiefly on animal husbandry for its materials, has during recent years been one of the most important single manufacturing industries in Canada.

The Canada Year Book, 1922-23, contained on pages 594 and 595 a historical description of the development and present position of the live stock industry in the Dominion, with statistics of farm animals from the decennial censuses, 1871 to 1921. A summary of this data is given in Table 36.

36.—Animals on Farms and Killed or Sold by Farmers in Canada, by censal years, 1871-1921.

Years.	Animals on Farms.			Animals killed or sold and wool sold.			
	Cattle.	Sheep.	Swine.	Cattle.	Sheep.	Swine.	Wool.
	No.	No.	No.	No.	No.	No.	Lb.
1871.....	2,484,655	3,155,509	1,366,083	507,725	1,557,430	1,216,097	11,103,480
1881.....	3,382,396	3,048,678	1,207,619	657,681	1,496,465	1,302,503	11,300,736
1891.....	3,997,023	2,563,781	1,733,850	957,737	1,464,172	1,791,104	10,031,970
1901.....	5,446,944	2,510,568	2,332,902	1,086,353	1,329,141	2,497,636	10,550,769
1911 ¹	6,649,982	2,227,916	3,691,235	1,752,792 ²	949,039 ²	2,771,755 ²	6,933,955
1921 ¹	8,391,424	3,196,078	3,324,291	1,616,626 ²	1,027,975 ²	1,779,339 ²	11,338,268

¹ Census taken as of June 1, while previous censuses were taken earlier in the year, so that a greater number of young animals are included in 1911 and 1921.

² Animals slaughtered on farms were not included. Following figures are comparable with data given for previous years (the 1911 amounts are partly estimated):

	Cattle.	Sheep.	Swine.
1911.....	1,915,059	1,097,015	4,282,624
1921.....	2,095,959	1,217,993	2,972,413

In Table 37 are given statistics showing the index numbers of animals on farms for the years 1918 to 1923, expressed as a percentage of the average numbers for the quinquennium 1911-1915.

37.—Index Numbers of Animals on Farms in Canada, calendar years 1918-1923.

(Average Number for 1911 to 1915=100.)

Years.	Animals on Farms.				
	Horses.	Milch Cows.	Other Cattle.	Sheep.	Swine.
1918.....	128.0	133.2	176.4	145.6	125.8
1919.....	130.1	133.6	177.2	163.2	118.5
1920.....	120.6	132.0	164.5	177.5	103.1
1921.....	135.2	140.7	175.4	175.3	114.5
1922.....	129.4	141.0	161.9	155.7	114.8
1923.....	125.2	137.8	151.5	131.4	129.2

Live Stock Marketed, 1922-23.¹—Public marketings of live stock in 1922-23 showed decreases in sales of cattle, calves and sheep and lambs of 32,000, 10,000 and 86,000 respectively. These were, however, more than offset in number by a large increase in hog marketings of 196,000 head. With relation to the various stock-yards, the net increase of about 67,000 resulted from increases at Toronto, Winnipeg, Moose Jaw and Prince Albert of 57,758, 38,916, 16,149 and 3,715 respectively, and decreases at Montreal, Edmonton and Calgary of 3,969, 30,047 and 15,327 total head.

Data similar to those in Table 27 show that, with regard to the interprovincial movement of live stock, Saskatchewan was the largest shipper of cattle to other provinces in 1923. This province shipped a total of 177,089 head, 164,780 going to other provinces and 12,309 being for export. Manitoba received 157,025 head from Saskatchewan. Manitoba was also a heavy shipper, sending 66,118 head for export and 93,703 to other provinces, a total of 159,821. Alberta shipped 108,208

¹See also diagram on page 560.

head, 2,076 for export and 106,132 to other provinces. Manitoba received 42,906 head of the Alberta shipments. Total receipts of cattle in Manitoba from other provinces amounts to 200,175, while Ontario received 104,209 head.

The number of live stock marketed in different ways, through stock-yards, through the packers or by direct shipment for export, is given for the calendar year 1923 in Table 38. In Table 39 are given the statistics of the number of animals marketed through the stock-yards in 1923, by grades. The disposition of the live stock so marketed is given in Table 40.

38.—Live Stock Marketed through Stock-yards, Packers, etc., in several Provinces of Canada, calendar year 1923.

Live Stock.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	Total.
Cattle—	No.	No.	No.	No.	No.	No.
Total to stock-yards.....	18,832	322,726	85,696	175,107	184,534	786,895
Direct to packers.....	2,221	9,738	1,791	1,618	27,132	42,500
Direct to export.....	1,140	33,956	3,544	7,654	7,232	53,526
Total.....	22,193	366,420	91,031	184,379	218,898	882,921
Calves—						
Total to stock-yards.....	62,691	125,792	14,259	18,152	24,554	245,448
Direct to packers.....	10,493	35,168	298	76	10,890	56,925
Direct to export.....	1,741	10,429	428	336	115	13,049
Total.....	74,925	171,389	14,985	18,564	35,559	315,422
Hogs—						
Total to stock-yards.....	68,595	472,123	123,090	163,982	172,287	1,000,077
Direct to packers.....	23,391	1,036,332	33,016	35,237	234,093	1,362,069
Direct to export.....	16	215	—	20	5	256
Total.....	92,002	1,508,670	156,106	199,239	406,385	2,362,402
Sheep—						
Total to stock-yards.....	154,667	182,388	22,962	22,266	61,835	445,118
Direct to packers.....	18,259	20,855	1,112	2,780	15,517	58,523
Direct to export.....	2,959	1,454	—	1,273	3,973	9,659
Total.....	175,885	204,697	24,074	26,319	81,325	512,300
Store cattle purchased.....	1,418	93,855	19,309	9,523	40,013	164,118

39.—Grading of Live Stock Marketed at the Stock-yards of Canada, by Provinces, calendar year 1923.

Grading of Live Stock.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	Total.
Cattle—	No.	No.	No.	No.	No.	No.
Steers, 1,200 lb. and up.....	53	36,652	14,143	436	10,721	62,005
Steers, 1,000-1,200 lb. Good.....	3,398	35,550	16,682	1,107	11,539	63,256
Common.....	3,277	8,407	7,707	507	4,137	24,035
Steers, 700-1,000 lb. Good.....	6,249	34,576	7,998	864	3,400	53,087
Common.....	7,239	22,217	3,860	593	1,357	35,266
Heifers..... Good.....	752	35,161	19,206	806	10,849	66,774
Fair.....	3,031	13,154	13,654	741	2,618	33,198
Common.....	1,772	15,976	10,267	348	2,108	30,471
Cows..... Good.....	5,992	32,243	25,392	934	15,453	80,014
Common.....	12,019	28,673	20,857	1,094	10,578	73,221
Bulls..... Good.....	771	4,380	1,579	75	757	7,562
Common.....	4,109	5,359	2,569	84	1,221	13,342
Canners and cutters.....	2,968	8,576	21,883	629	6,285	40,341
Oxen.....	295	11	1,089	98	85	1,578
Milch cows.....	5,394	—	—	—	—	5,394
Stockers, 450-800 lb. Good.....	—	11,813	16,423	705	20,003	48,944
Fair.....	—	19,774	27,728	728	11,754	59,984
Feeders, 800-1,100 lb. Good.....	—	11,899	35,147	1,997	22,634	71,667
Fair.....	—	10,319	36,054	1,170	6,802	54,345
Total.....	57,319	334,740	282,218	12,916	142,301	829,494

39.—Grading of Live Stock Marketed at the Stock-yards of Canada, by Provinces, calendar year 1923—concluded.

Grading of Live Stock.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	Total.
	No.	No.	No.	No.	No.	No.
Calves—						
Veal.....	68,176	75,729	34,380	1,281	21,632	201,198
Grass.....	38,918	9,247	—	11	—	48,176
Total.....	107,094	84,976	34,380	1,292	21,632	249,374
Hogs—						
Select bacon.....	30,219	100,228	15,095	2,307	5,007	152,856
Thick smooth.....	82,393	185,559	149,307	31,278	116,730	565,267
Heavies.....	9,169	28,956	18,911	3,969	5,238	66,243
Ex. heavies.....	799	1,718	5,297	1,209	787	9,810
Shop hogs.....	65,565	39,348	15,631	3,603	13,905	138,052
Lights and feeders.....	6,609	8,548	25,479	1,460	14,106	56,202
Roughs.....	695	103	702	180	485	2,165
Sows, No. 1.....	775	1,494	8,695	1,608	3,783	16,355
Sows, No. 2.....	5,658	5,674	4,042	750	1,831	17,955
Stags.....	269	449	633	147	287	1,785
Total.....	202,151	372,077	243,792	46,511	162,159	1,026,690
Sheep and Lambs—						
Lambs.....	99,729	145,551	16,443	1,944	41,688	305,355
Good.....	52,404	14,767	5,057	765	1,519	74,512
Common.....	807	2,730	—	19	—	3,556
Sheep.....	6,629	20,881	11,382	2,168	21,359	62,419
Light.....	7,872	5,132	3,138	878	1,145	18,165
Common.....	—	—	—	—	—	—
Total.....	167,441	189,061	36,020	5,774	65,711	464,007

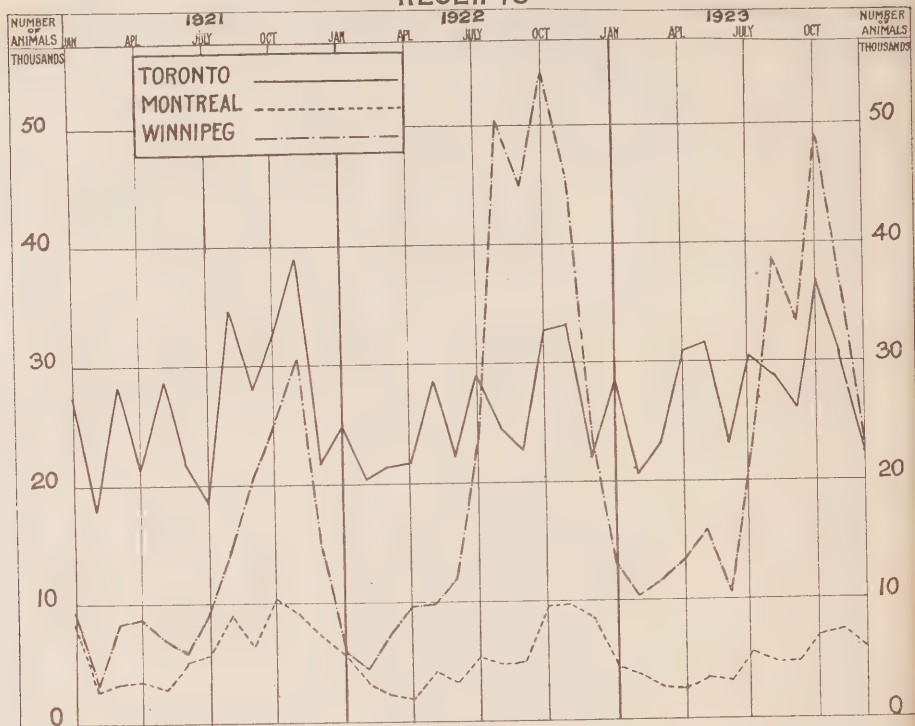
40.—Receipts and Disposition of Live Stock at Principal Markets in Canada, calendar years 1922 and 1923.

Markets and Classification.	1922.				1923.			
	Cattle (Total).	Calves.	Hogs.	Sheep and Lambs.	Cattle (Total).	Calves.	Hogs.	Sheep and Lambs.
	No.	No.	No.	No.	No.	No.	No.	No.
Toronto—								
Receipts (Total).....	303,882	84,263	308,908	217,368	336,144	85,787	377,043	192,640
Shipments (Total).....	336,935	87,968	315,451	216,981	338,323	85,365	378,502	188,003
1. Can. Packing Houses.....	205,741	53,954	253,599	152,648	212,286	48,646	341,639	125,199
2. Local Butchers.....	26,676	30,762	57,142	53,514	27,370	29,081	26,850	48,265
3. Country Points.....	60,239	2,869	4,690	8,166	57,981	2,866	6,521	14,368
4. Other Stock-yards.....	—	—	—	—	3,504	181	3,492	171
5. U. S. Exports.....	4,905	383	—	2,653	3,043	4,591	—	—
6. Overseas Exports.....	9,374	—	—	—	34,139	—	—	—
Montreal (Pt. St. Charles)—								
Receipts (Total).....	33,078	53,040	106,341	112,614	32,548	58,145	144,210	109,057
Shipments (Total).....	34,626	51,929	105,056	116,700	30,861	55,836	134,623	106,600
1. Can. Packing Houses.....	27,116	43,346	94,560	84,842	23,959	42,702	123,346	87,869
2. Local Butchers.....	6,121	7,975	9,361	17,137	6,540	12,769	11,087	15,376
3. Country Points.....	1,373	341	1,135	1,277	283	19	190	538
4. Other Stock-yards.....	—	—	—	—	57	91	—	985
5. U. S. Exports.....	—	267	—	13,444	22	255	—	1,832
6. Overseas Exports.....	16	—	—	—	—	—	—	—
Montreal (East End)—								
Receipts (Total).....	34,021	57,336	58,450	83,094	24,771	48,949	57,941	58,384
Shipments (Total).....	33,150	55,677	58,150	83,283	25,238	48,737	57,105	58,337
1. Can. Packing Houses.....	6,438	9,714	6,321	27,820	9,490	10,427	7,776	22,184
2. Local Butchers.....	23,696	43,674	50,811	40,041	13,638	36,555	49,107	26,339
3. Country Points.....	2,936	1,449	1,018	4,861	2,013	6	222	400
4. Other Stock-yards.....	—	—	—	—	28	1,749	—	5,116
5. U. S. Exports.....	80	840	—	10,561	—	—	—	4,298
6. Overseas Exports.....	—	—	—	—	69	—	—	—

CATTLE

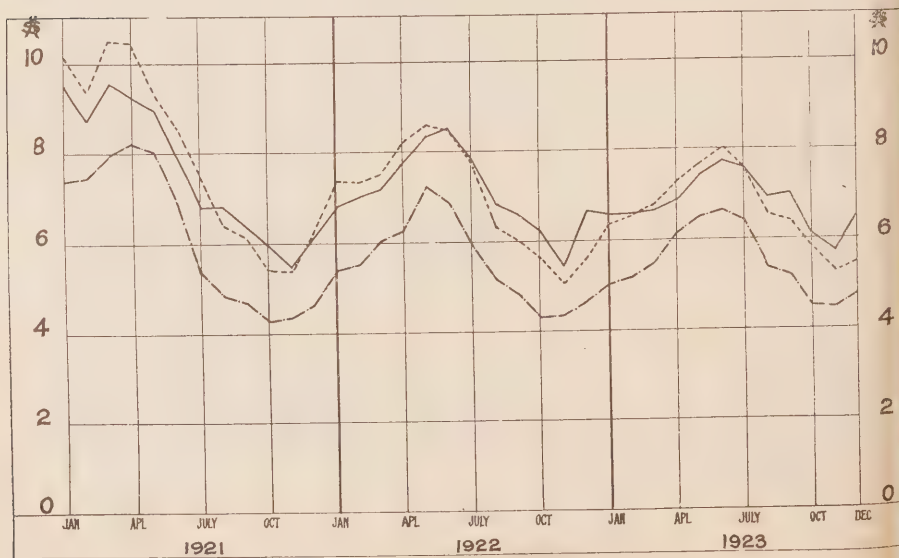
RECEIPTS AND PRICES AT TORONTO, MONTREAL & WINNIPEG 1921-22-23.

RECEIPTS



PRICES

Steers 1000 lbs - 1200 lbs Good



40.—Receipts and Disposition of Live Stock at Principal Markets in Canada, calendar years 1922 and 1923—concluded.

Markets and Classification.	1922.				1923.			
	Cattle (Total).	Calves.	Hogs.	Sheep and Lambs.	Cattle (Total).	Calves.	Hogs.	Sheep and Lambs.
	No.	No.	No.	No.	No.	No.	No.	No.
Winnipeg—								
Receipts (Total).....	294,008	34,158	176,777	52,461	282,218	34,380	243,792	36,020
Shipments (Total).....	293,711	34,340	177,284	51,270	285,233	34,082	245,616	36,811
1. Can. Packing Houses.....	119,666	17,407	150,503	39,662	135,291	19,819	210,117	27,321
2. Local Butchers.....	9,669	9,184	5,720	4,496	6,940	8,260	2,434	2,088
3. Country Points.....	74,967	3,331	21,061	7,112	42,748	3,271	20,532	7,202
4. Other Stock-yards.....	—	—	—	—	27,316	443	12,533	—
5. U. S. Exports.....	88,348	4,408	—	—	63,302	2,289	—	—
6. Overseas Exports.....	1,061	—	—	—	9,636	—	—	—
Calgary—								
Receipts (Total).....	89,610	16,313	82,583	61,141	77,360	11,338	88,658	56,964
Shipments (Total).....	105,907	1	81,600	60,555	88,380	1	89,003	57,577
1. Can. Packing Houses.....	51,873	—	73,942	41,781	45,621	—	82,478	40,853
2. Local Butchers.....	1,513	—	424	643	1,375	—	345	32
3. Country Points.....	32,931	—	7,203	13,146	35,273	—	5,681	15,660
4. Other Stock-yards.....	—	—	—	—	826	—	499	—
5. U. S. Exports.....	19,465	—	31	4,985	3,958	—	—	1,032
6. Overseas Exports.....	125	—	—	—	1,327	—	—	—
Edmonton—								
Receipts (Total).....	88,432	12,827	71,047	15,206	64,941	10,294	73,501	8,747
Shipments (Total).....	90,198	11,880	71,125	14,200	64,966	9,460	74,231	8,565
1. Can. Packing Houses.....	35,273	6,376	57,012	6,928	26,134	6,467	52,781	5,397
2. Local Butchers.....	3,451	1,148	1,382	3,446	4,534	1,262	2,460	2,371
3. Country Points.....	23,312	1,524	12,666	3,826	14,599	946	9,562	797
4. Other Stock-yards.....	—	—	—	—	7,517	585	9,428	—
5. U. S. Exports.....	17,422	2,775	65	—	11,186	200	—	—
6. Overseas Exports.....	733	—	—	—	996	—	—	—
Prince Albert—								
Receipts (Total).....	4,856	490	7,562	750	3,955	425	12,794	199
Shipments (Total).....	4,841	490	7,446	750	3,957	425	12,716	197
1. Can. Packing Houses.....	1,468	275	6,722	460	1,721	304	11,647	140
2. Local Butchers.....	202	33	30	14	317	35	64	7
3. Country Points.....	3,144	182	694	276	874	57	529	50
4. Other Stock-yards.....	—	—	—	—	1,045	29	476	—
5. U. S. Exports.....	27	—	—	—	—	—	—	—
Moose Jaw—								
Receipts (Total).....	10,308	714	14,399	7,550	8,961	867	33,717	5,575
Shipments (Total).....	9,975	686	14,693	5,853	8,641	683	33,832	6,606
1. Can. Packing Houses.....	3,597	5	13,359	3,810	2,694	307	32,136	2,819
2. Local Butchers.....	1,629	474	288	813	740	244	275	284
3. Country Points.....	3,751	181	1,046	983	2,709	66	1,134	3,264
4. Other Stock-yards.....	—	—	—	—	1,939	66	287	239
5. U. S. Exports.....	998	20	—	247	559	—	—	—

¹ Included with Cattle.

Slaughtering and Meat Packing.—The tendency to large scale production in the industry is shown in the summary of census records below. The number of establishments has rapidly dropped off while the industry has grown by leaps and bounds. The concentration of the industry into a comparatively small number of large establishments has resulted in the utilization of by-products and in a marked increase in economy and efficiency of operation. In addition to the principal statistics reported in the decennial censuses from 1871 to 1911, annual figures collected through the Census of Industry for the years 1918 to 1922 are included in Table 41, whilst live stock slaughtered at Canadian inspected establishments in 1922 and 1923 are given in Table 42 and the per capita consumption of meat and other animal products in Canada in Table 43.

41.—Principal Statistics of the Slaughtering and Meat-Packing Industry of Canada, by censal years 1871 to 1922.

Description.	1871.	1881.	1891.	1901. ¹	1911. ¹
Establishments..... No.	193	203	527	57	80
Capital Invested..... \$	419,325	1,449,679	2,173,077	5,395,162	15,321,088
Employees..... No.	841	852	1,690	2,416	4,214
Salaries and Wages..... \$	145,376	209,483	503,053	1,020,164	2,685,518
Cost of Materials..... \$	2,942,786	3,163,576	5,554,246	19,520,058	40,951,761
Value of Products..... \$	3,799,552	4,084,133	7,125,831	22,217,984	48,527,076

Description.	1918.	1919.	1920.	1921.	1922.
Establishments..... No.	78	82	86	84	83
Capital Invested..... \$	86,969,756	93,363,791	84,288,306	58,459,555	56,710,481
Employees..... No.	11,917	13,222	11,978	9,711	9,800
Salaries and Wages..... \$	12,173,389	15,302,388	16,691,471	13,547,778	12,366,896
Cost of Materials..... \$	171,023,104	175,133,821	170,916,888	113,389,835	115,154,525
Value of Products..... \$	229,231,666	233,936,913	240,544,618	153,136,289	143,414,693

¹Includes only establishments employing five hands and over.

42.—Live Stock Slaughtered at Canadian Inspected Establishments, by months, 1922 and 1923.

Months.	1922.			1923.		
	Cattle.	Sheep.	Swine.	Cattle.	Sheep.	Swine.
	No.	No.	No.	No.	No.	No.
January.....	44,845	20,259	168,988	49,816	29,490	225,165
February.....	39,568	14,180	144,398	41,556	14,465	175,831
March.....	64,149	11,366	159,142	60,943	14,420	168,855
April.....	78,841	7,150	154,691	71,769	9,209	200,364
May.....	81,633	16,088	160,920	80,761	11,037	190,757
June.....	64,680	32,184	152,146	55,203	19,171	131,492
July.....	57,665	44,913	120,779	62,859	31,883	157,632
August.....	72,466	86,488	125,815	71,698	73,056	164,222
September.....	80,544	112,243	130,943	68,586	70,272	150,692
October.....	96,239	131,537	176,597	96,061	108,463	192,194
November.....	90,095	81,164	230,455	95,326	84,676	243,151
December.....	60,976	38,831	202,338	57,564	33,603	256,039
Total.....	831,701	596,403	1,927,212	812,142	499,745	2,255,394

Consumption of Animal Products.—The consumption of meats in Canada in 1923 is estimated at 640,777,958 pounds of beef, 740,388,765 pounds of pork and 78,611,202 pounds of mutton and lamb. The per capita consumption of beef on this basis amounts to 70.55 pounds; pork, 81.50 pounds; and mutton and lamb, 8.66 pounds; a total of 160.71 pounds of meats per capita per annum. The corresponding data for other animal products is as follows:—butter, 251,038,733 pounds and 27.63 pounds; cheese, 28,503,602 pounds and 3.14 pounds; eggs, 230,909,648 dozen and 25.42 dozen; and poultry, 67,687,068 pounds and 7.45 pounds.

43.—Total and per capita consumption of Meats and Produce in Canada per Annum, calendar years 1920-1923.

BEEF.

Items.		1920.	1921.	1922.	1923.
Slaughtered in Canada—					
Cattle.....	No.	1,344,749	1,513,026	1,392,407	1,365,767
Calves.....	"	451,952	503,696	506,795	484,324
Total.....	"	1,796,701	2,016,722	1,899,202	1,850,091
Estimated Dressed Weight—					
Cattle.....	lb.	605,137,050	605,210,400	626,583,150	614,595,150
Calves.....	"	45,195,200	50,369,000	50,679,500	48,432,400
Total.....	"	650,332,250	655,579,400	677,262,650	663,027,550
Net Exports of Beef.....	"	63,364,556	31,576,671	25,371,434	22,249,592
Total Consumption.....	"	586,967,694	624,002,729	651,891,216	640,777,958
Consumption per Capita.....	"	68·00	71·00	72·90	70·55

PORK.

Slaughtered in Canada.....	No.	4,834,025	5,297,461	5,382,196	6,055,957
Estimated Dressed Weight.....	lb.	638,091,300	699,264,852	710,449,872	799,386,324
Net Exports of Pork.....	"	76,100,050	53,006,245	48,472,546	58,997,559
Total Consumption.....	"	561,991,250	646,258,607	661,977,326	740,388,765
Consumption per Capita.....	"	65·11	73·53	74·05	81·50

MUTTON AND LAMB.

Slaughtered in Canada—					
Mature Animals.....	No.	1,119,854	1,176,685	1,038,997	911,171
Lambs.....	"	373,285	392,228	346,332	303,724
Total.....	"	1,493,139	1,568,913	1,385,329	1,214,895
Estimated Dressed Weight—					
Mature Animals.....	lb.	83,989,050	88,251,375	77,924,775	68,337,825
Lambs.....	"	13,064,975	13,727,980	12,121,620	10,630,340
Total.....	"	97,054,025	101,979,355	90,046,395	78,968,165
Net Exports.....	"	1,256,137	2,161,987	2,627,375	356,963
Total Consumption.....	"	95,797,888	99,817,368	87,419,020	78,611,202
Consumption per Capita.....	"	11·10	11·36	9·77	8·66

SUMMARY.

Beef.....	lb.	68·00	71·00	72·90	70·55
Pork.....	"	65·11	73·53	74·05	81·50
Mutton and Lamb.....	"	11·10	11·36	9·77	8·66
Total Consumption per Capita.....	"	144·21	155·89	156·72	160·71

BUTTER.

On Hand January 1.....	lb.	15,465,416	14,640,354	11,629,530	14,645,599
Production—Creamery.....	"	111,691,718	128,744,610	152,501,900	163,456,759
Home-made.....	"	103,487,506	100,000,000	100,000,000	100,000,000
Imports.....	"	1,104,625	4,018,159	6,396,836	2,738,065
Exports.....	"	231,749,265	247,403,123	270,528,266	280,840,423
On Hand December 31.....	"	13,361,020	9,132,926	21,504,808	13,173,711
Total Consumption.....	"	218,388,245	238,270,197	249,023,458	267,666,712
Consumption per Capita.....	"	14,640,354	11,629,530	14,645,599	16,627,979
Total Consumption.....	"	203,747,891	226,640,667	234,377,859	251,038,733
Consumption per Capita.....	"	23·61	25·79	26·22	27·63

43.—Total and per capita consumption of Meats and Produce in Canada per Annum, calendar years 1920-1923.—concluded.

CHEESE.

Items.		1920.	1921.	1922.	1923.
On Hand January 1.....	lb.	27,204,039	11,229,296	15,540,495	5,178,881
Production—Factory.....	"	149,201,856	162,117,494	135,821,116	151,483,353
Home-made.....	"	533,561	500,000	500,000	500,000
Imports.....	"	479,934	908,008	686,754	1,899,522
Exports.....	"	177,419,390	174,754,798	152,548,365	159,061,756
On Hand, December 31.....	"	142,767,545	137,180,457	120,177,200	116,201,900
On Hand, December 31.....	"	34,651,845	37,574,341	32,371,165	42,859,856
Total Consumption.....	"	11,229,296	15,540,495	5,178,881	14,356,254
Consumption per Capita.....	"	23,422,549	22,033,846	27,192,284	28,503,602
		2·71	2·51	3·04	3·14

EGGS.

Production—Farm.....	doz.	120,155,240	168,049,154	194,058,468	202,186,508
Other.....	"	24,319,832	25,000,000	25,000,000	25,000,000
Imports.....	"	6,515,928	6,582,739	8,140,547	6,623,251
Exports.....	"	150,991,000	199,631,893	227,199,015	233,809,759
Total Consumption.....	"	6,322,838	5,444,014	3,619,356	2,900,111
Per Capita Consumption.....	"	144,668,162	194,187,879	223,579,659	230,909,648
		16·76	22·10	24·99	25·42

POULTRY.¹

Poultry—On farms.....	No.	—	43,347,194	42,930,562	45,469,289
Elsewhere.....	"	—	6,978,054	7,082,000	7,082,000
Total.....	"	—	50,325,248	50,012,562	52,551,289
Marketings.....	"	—	12,581,312	12,503,140	13,137,823
Exports.....	"	—	849,614	600,704	569,239
Total Consumption.....	"	—	11,731,698	11,902,436	12,568,584
Total Consumption.....	lb.	—	61,222,185	63,447,049	67,687,068
Consumption per Capita.....	lb.	—	6·97	7·10	7·45

¹Includes fowl, turkeys, geese and ducks; years 1921-23.

Interprovincial Trade in Meats.—Ontario was the largest shipper of meats in the calendar year 1923, shipping in all 210,337,918 pounds of meats. Beef shipments amounted to 61,253,257 pounds; veal, 1,390,190 pounds; mutton and lamb, 1,533,182 pounds; fresh pork, 4,468,497 pounds; cured pork, 96,272,697 pounds; pure lard, 16,567,683 pounds; lard compound, 9,341,151 pounds; and miscellaneous items, 19,511,261 pounds. Total shipments to other provinces amounted to 97,767,491 pounds, including 50,844,607 pounds of beef, 11,184,094 pounds of cured pork and 12,020,452 pounds of pure lard. Export shipments from Ontario amounted to 112,570,427 pounds, 90,791,873 pounds going to Great Britain, 11,249,353 pounds to the United States, 1,050,701 pounds to Newfoundland and 9,468,500 pounds to other countries. Cured pork was the largest item in these exports, accounting for 85,088,603 pounds. Exports of beef amounted to 10,408,650 pounds.

Manitoba was the second largest shipper of meats in 1923, shipping 36,314,019 pounds to other provinces and 9,277,171 pounds for export, a total movement of 45,591,190 pounds of meat products out of the province. Shipments of beef amounted to 15,133,218 pounds; fresh pork, 2,491,522 pounds; cured pork,

3,596,118 pounds; while 22,785,536 pounds were classified as miscellaneous. Exports to Great Britain amounted to 6,194,005 pounds and to the United States, 2,167,744 pounds. Of the total export shipments, 5,371,038 pounds were beef and 2,637,699 pounds cured pork.

Shipments out of Quebec amounted to 20,812,419 pounds, 17,880,943 pounds going to other provinces and 11,931,476 pounds for export. Shipments out of the province included 8,656,098 pounds of cured pork, 2,552,172 pounds of beef and 14,591,650 pounds classified as miscellaneous.

Shipments out of Alberta amounted to 9,914,696 pounds to other provinces and 5,046,466 pounds for export, a total of 14,961,162 pounds. Beef shipments amounted to 2,203,948 pounds; cured pork, 4,167,376 pounds; and miscellaneous, 6,418,814 pounds.

Other shipments were as follows: from British Columbia, 1,462,870 pounds; Saskatchewan, 1,026,115; New Brunswick, 463,788; Prince Edward Island, 414,887; and Nova Scotia, 348,042. Shipments by provinces of destination were as follows: to Quebec, 76,493,549 pounds; Ontario, 32,949,946; Nova Scotia, 20,770,473; New Brunswick, 15,296,110; British Columbia, 7,505,873; Saskatchewan, 5,352,584; Manitoba, 1,888,117; Prince Edward Island, 1,780,446; Alberta, 528,560.

44.—Summary of Interprovincial Shipments of Meats for fiscal year ended Mar. 31, 1923.

Provinces.	Beef.	Veal.	Mutton and Lamb.	Pork fresh.	Pork cured.	Miscellaneous. ¹	Total.
	lb.	lb.	lb.	lb.	lb.	lb.	lb.
PRINCE EDWARD ISLAND—							
Shipments to other provinces.....	—	—	21,200	200	44,742	—	66,142
Exports.....	2,577	—	4,680	5,166	115,027	6,045	133,495
Total shipments out of province.....	2,577	—	25,880	5,366	159,769	6,045	199,637
NOVA SCOTIA—							
Shipments to other provinces.....	—	—	—	—	—	—	—
Exports.....	176,166	60	5,569	6,408	86,910	39,567	314,680
Total shipments out of province.....	176,166	60	5,569	6,408	86,910	39,567	314,680
NEW BRUNSWICK—							
Shipments to other provinces.....	—	—	310,585	—	—	—	310,585
Exports.....	—	—	—	—	—	—	—
Total shipments out of province.....	—	—	310,585	—	—	—	310,585
QUEBEC—							
Shipments to other provinces.....	1,224,444	146,812	97,422	252,367	879,470	12,870,688	15,471,203
Exports.....	1,868,330	2,004,595	487,646	1,734	7,714,339	263,909	12,340,533
Total shipments out of province.....	3,092,774	2,151,407	585,068	254,101	8,593,809	13,134,597	27,811,736
ONTARIO—							
Shipments to other provinces.....	46,704,153	187,900	521,623	3,420,195	11,783,910	32,249,916	94,867,697
Exports.....	15,226,569	2,744,023	2,453,210	355,099	86,316,139	13,634,767	120,729,807
Total shipments out of province.....	61,930,722	2,931,923	2,974,833	3,775,294	98,100,049	45,884,683	215,597,504
MANITOBA—							
Shipments to other provinces.....	7,804,911	165,071	136,096	2,446,013	1,020,746	18,399,411	29,972,248
Exports.....	5,211,425	267,792	35,946	95,231	3,949,023	2,283,898	11,833,315
Total shipments out of province.....	13,016,336	422,863	172,042	2,541,244	4,969,769	20,683,309	41,805,563

**44.—Summary of Interprovincial Shipments of Meats for fiscal year ended
March 31, 1923—concluded.**

Provinces.	Beef.	Veal.	Mutton and Lamb.	Pork fresh.	Pork cured.	Miscel- laneous. ¹	Total.
	lb.	lb.	lb.	lb.	lb.	lb.	lb.
SASKATCHEWAN—							
Shipments to other prov- inces.....	—	—	—	—	—	77,115	77,115
Exports.....	11,045	—	—	90	908,696	17,812	937,643
Total shipments out of province.....	11,045	—	—	90	908,696	94,927	1,014,758
ALBERTA—							
Shipments to other prov- inces.....	623,524	166,282	42,807	924,501	522,167	8,412,172	10,691,453
Exports.....	1,667,542	1,505	1,069	226,679	3,055,531	129,612	5,081,938
Total shipments out of province.....	2,291,066	167,787	43,876	1,151,180	3,577,698	8,541,784	15,773,391
BRITISH COLUMBIA—							
Shipments to other prov- inces.....	—	—	—	—	—	103,950	103,950
Exports.....	655,287	—	757	887	46,975	87,473	791,379
Total shipments out of province.....	655,287	—	757	887	46,975	191,423	895,329

¹Includes pure lard and lard compound.

International Trade in Animal Products.—Canada stood seventh among the leading cattle-holding nations, according to the latest available official returns as to animals on farms. United States was the largest holder, with 67,240,000 head; Argentina had 28,138,196; Germany, 16,652,831; Australia, 14,530,081; France, 13,575,840; Great Britain, 12,059,360; and Canada, 9,246,231.

Australia was the largest holder of sheep, with 82,226,470 head. Other principal sheep-raising countries had sheep on farms as follows: Argentina, 46,133,866; United States, 37,223,000; United Kingdom, 23,747,000; New Zealand, 22,928,864. Canada stood tenth, with 2,753,860.

Principal countries with swine on farms, together with the number shown, were as follows: United States, 68,227,000; Germany, 17,225,855; France, 5,195,740; Canada, 4,405,316; United Kingdom, 3,492,481; Denmark, 2,852,826.

During the fiscal year ended March 31, 1923, exports of live cattle from Canada amounted to 258,977 head, valued at \$9,128,476. Imports are shown of 963 cattle valued at \$143,953, leaving a net export of 258,014 head of cattle with a value of \$8,984,523. Sheep numbering 75,783, valued at \$498,060, were exported, while 8,005 head, valued at \$48,987, were imported. Net exports amounted to 67,778 head, with a value of \$449,073. The exports of live swine were small, amounting to 2,305 animals, with a value of \$45,209. Imports of swine for improvement of stock amounted to 13, valued at \$977, while 5,210 pounds, valued at \$1,419, were imported for other purposes. The net exports of live swine were valued at \$42,813.

Among the exports of animal products, pork was the most important, 108,523,900 pounds, with a value of \$23,583,194. Cheese stood second, with an export of 114,548,900 pounds, valued at \$20,828,234. Beef exports amounted to 29,145,800 pounds, valued at \$2,941,745. The value of all meats exported in the fiscal year 1922-23 was \$28,244,664. Butter exports increased to 21,994,578 pounds, valued at \$8,243,138. Other important exports were 3,613,531 dozens of eggs, valued at \$1,410,444, and 8,667,400 pounds of wool, valued at \$2,363,931.

4.—Cold Storage.

Cold Storage Warehouses.—Under the Cold Storage Act, 1907 (6-7 Edw. VII, c. 6), subsidies have been granted by the Dominion Government towards the construction and equipment of cold storage warehouses open to the public, the Act and regulations made thereunder being administered by the Department of Agriculture. Table 45 shows for 1924 the number of cold storage warehouses in Canada, with the refrigerated space. This amounts to 36,702,492 cubic feet, of which 5,244,358 cubic feet apply to warehouses subsidized under the Act, while 31,458,134 cubic feet apply to non-subsidized warehouses.

45.—Cold Storage Warehouses in Canada, 1924.

SUBSIDIZED PUBLIC WAREHOUSES.

Provinces.	Number.	Refrigerated space.	Cost.	Total subsidy.
		Cubic feet.	\$	\$
Prince Edward Island.....	1	200,000	50,000	15,000
Nova Scotia.....	3	571,440	287,237	78,171
New Brunswick.....	2	781,161	192,577	57,773
Quebec.....	2	248,394	245,287	73,586
Ontario.....	16	1,739,944	632,547	183,740
Manitoba.....	1	27,500	32,000	9,600
Saskatchewan.....	4	437,596	268,707	80,612
Alberta.....	2	351,159	242,000	72,600
British Columbia.....	3	887,164	458,000	137,400
Total subsidized.....	34	5,244,358	2,408,355	708,482

SUBSIDIZED AND NON-SUBSIDIZED.

Provinces.	No.	Refrigerated space.	Articles Stored.
		Cubic feet.	
Prince Edward Island.....	5	261,700	1 Bait and Fish, 1 Eggs, 1 Fox Meat and Meat, 2 Meat and General.
Nova Scotia.....	20	1,260,554	4 Bait and Fish, 1 Butter, 3 Butter and Ice Cream, 1 Dairy Produce, Fish and Meat, 1 Eggs, 5 Fish, 3 Fish and Meat, 1 General, 1 Meat and Produce.
New Brunswick.....	24	975,391	18 Bait and Fish, 1 Butter, Eggs and Ice Cream, 1 Cured Meat, 1 Eggs, 2 General, 1 Meat and Poultry.
Quebec.....	61	7,693,354	1 Butter, 1 Butter and Eggs, 1 Butter, Eggs and Meat, 4 Butter and Ice Cream, 1 Butter and Meat, 2 Cured Meat, 2 Fresh and Cured Meat, 5 Dairy Produce, 1 Dairy Produce, Eggs and Meat, 4 Dairy Produce and Meat, 2 Packing House and Dairy Products, 3 Fish, 1 Fish, Meat and Poultry, 10 General, 4 General Produce, 9 Meat, 1 Meat, and General, 3 Meat and General Produce, 2 Meat Products, 3 Meat and Poultry, 1 Meat, Poultry and General Produce.
Ontario.....	139	11,649,024	22 Butter, 1 Butter and Cheese, 2 Butter and Dairy Produce, 3 Butter and Eggs, 1 Butter, Eggs and General, 1 Butter, Eggs and Meat, 2 Butter, Eggs and Poultry, 1 Butter and Farm Produce, 1 Butter and General, 16 Butter and Ice Cream, 1 Butter and Meat, 1 Butter and Milk, 1 Cheese and Meat, 4 Cured Meat, 1 Cured Meat and Fish, 1 Dairy Produce and Eggs, 4 Dairy Produce, Eggs and Meat, 1 Dairy and Farm Produce, 1 Dairy Produce and Meat, 1 Dairy Produce, Meat and Poultry, 1 Eggs, 6 Eggs and General, 12 Fish, 1 Fish and Fruit, 1 Fish and General, 2 Fish and Meat, 2 Fish, Meat and General, 4 Fruit, 4 Fruit and Jam, 1 Fruit and Meat, 1 Fruit and Meat Products, 1 Fruit and Vegetables, 16 General, 3 General Produce, 1 Hog Products, 2 Ice Cream, 5 Meat, 4 Meat and General, 2 Milk, Ice Cream and Butter, 4 Packing House and Dairy Products.

45.—Cold Storage Warehouses in Canada, 1924—concluded.

Provinces.	No.	Refrig- ated space.	Articles Stored.
Manitoba.....	42	Cubic feet. 4,006,147	2 Butter, 5 Butter and Ice Cream, 1 Butter and Meat, 1 Dairy Produce and Vegetables, 2 Dairy Products and Meat, 15 Fish, 1 Fish and Poultry, 5 General, 1 General Produce, 6 Meat, 1 Meat and General, 1 Meat and General Produce, 1 Packing House Products.
Saskatchewan.....	35	1,851,512	7 Butter, 1 Butter, Eggs and Meat, 8 Butter and Ice Cream, 1 Eggs and General, 3 Fish, Meat and General Produce, 6 General, 3 General Produce, 1 Meat, 1 Meat and General, 2 Meat and General Produce, 1 Milk, Ice Cream and Butter, 1 Packing House Products.
Alberta.....	21	3,809,835	2 Butter, 5 Butter and Ice Cream, 1 Eggs and Fruit, 1 Fish, Meat and General Produce, 1 Fish, Meat and Poultry, 3 General, 4 Meat, 4 Packing House Products.
British Columbia.....	49	5,150,075	6 Butter, 2 Butter and General, 1 Butter and General Produce, 3 Butter and Ice Cream, 1 Butter and Meat, 9 Fish, 1 Fish and General, 2 Fish and Meat, 4 Fish, Meat and General Produce, 2 Fruit, 1 Fruit and Jam, 7 General, 4 Meat, 2 Meat and General, 2 Packing House Products, 1 Packing House Products and Eggs, 1 Packing House Products and General.
Yukon.....	1	44,900	1 Fish.
Total.....	397	36,702,492	

Cold Storage Stocks.—Statistics of the stocks of food in the cold storage warehouses of Canada are collected and published monthly by the Internal Trade Branch of the Dominion Bureau of Statistics. A summary of the cold storage data is included in the report on "Live Stock and Animal Products Statistics," published annually. Judging by the average of the stocks on hand on the first of each month, the cold storage holdings of eggs during 1923 approximated to the unusually large holdings of the previous year. The cold storage stocks of butter and cheese increased and decreased respectively during the same period. In Table 46 are included statistics by months for 1923 of the stocks of food in cold storage and in process of cure, for various important commodities.

46.—Stocks of Food on Hand in Cold Storage and in Process of Cure, by Months and Commodities, 1923.¹

Months.	Eggs.	Butter.	Cheese.	Beef.		
				Fresh.	Cured.	In process of cure.
	Doz.	lb.	lb.	lb.	lb.	lb.
January.....	3,351,063	14,645,599	5,178,881	25,255,609	1,354,676	232,849
February.....	1,140,187	10,571,845	3,902,234	22,418,066	407,311	196,469
March.....	483,996	5,971,269	1,992,273	18,389,822	365,819	179,197
April.....	835,285	3,173,757	1,371,557	14,232,827	417,228	272,220
May.....	2,535,652	2,105,400	1,691,603	12,845,013	358,183	175,930
June.....	10,964,833	3,755,871	4,225,651	10,780,206	319,297	100,829
July.....	16,446,879	13,683,462	13,247,943	7,295,546	277,901	157,160
August.....	17,167,859	26,778,077	18,504,513	7,298,480	307,883	132,931
September.....	16,258,745	32,406,546	20,392,472	8,015,910	199,940	118,460
October.....	15,571,849	32,287,979	18,026,191	9,791,750	190,306	182,267
November.....	10,888,535	28,699,569	17,444,256	16,808,194	235,762	115,857
December.....	5,956,953	20,972,593	14,854,978	23,104,766	205,491	94,820
January.....	2,260,234	16,627,979	14,356,254	21,501,052	179,718	148,405

¹Figures in this table are of stocks on hand on the first of each month.

46.—Stocks of Food on hand in Cold Storage and in Process of Cure, by Months and Commodities, 1923—concluded.

Months.	Pork.			Lard.	Mutton and Lamb.	Oleomargarine.	Poultry.
	Fresh.	Cured.	In process of cure.				
	lb.	lb.	lb.	lb.	lb.	lb.	lb.
1923.							
January.....	10,550,966	10,461,605	7,663,737	2,439,533	6,461,717	195,535	5,984,932
February.....	15,481,589	10,823,869	8,925,542	2,297,179	6,291,921	197,785	5,781,966
March.....	17,989,001	12,179,641	8,547,875	2,626,539	5,534,953	118,113	5,529,989
April.....	19,398,520	9,422,971	9,373,374	2,239,003	3,983,541	180,189	4,660,304
May.....	20,495,957	10,476,346	10,128,156	2,701,278	3,229,211	227,891	3,284,536
June.....	18,339,753	10,829,141	10,090,789	3,078,489	2,008,223	179,809	2,722,513
July.....	15,085,130	9,190,307	9,407,084	3,294,574	1,192,532	181,775	2,088,169
August.....	1,663,728	10,018,424	9,085,279	3,459,278	735,982	515,061	1,620,425
September.....	9,486,569	8,006,864	8,948,723	2,751,959	753,588	1,457,683	1,042,304
October.....	6,848,797	7,266,427	8,406,190	2,074,763	953,377	1,395,022	1,056,395
November.....	5,500,005	4,597,790	7,874,857	1,602,614	2,949,287	1,054,262	1,320,772
December.....	7,914,620	7,925,264	9,652,095	2,250,910	4,634,219	716,956	2,698,519
1924.							
January.....	12,391,804	10,089,625	10,805,841	2,357,237	4,850,146	462,896	6,780,367

5.—Coal Prices and Distribution.

In addition to the statistics of the supply and distribution of coal which are summarized in the Mines and Minerals section of the Year Book, the Internal Trade Branch of the Dominion Bureau of Statistics receives a monthly return from wholesale and retail dealers throughout Canada, showing receipts and stocks on hand, together with a statement of cost at the mine, with transportation and incidental charges, as well as prices. A monthly compilation of the return is made, stocks in store being compiled monthly for seaboard points and quarterly for the whole country. The distribution of coal by the retail dealers in Canada increased from 4.8 million tons in 1922 to 5.9 million tons in the following year. The provincial distribution through retail dealers for three years is given in Table 47, and the average yearly retail prices from 1921 to 1923 for the principal cities are presented in Table 48.

47.—Distribution of Coal through Retail Dealers, by Provinces, 1921-1923.

(Short tons.)

Provinces.	Years.	Anthracite Coal from		Bituminous Coal from		Canadian Bituminous, Lignite and others.	Total.
		United States.	Great Britain.	United States.	Great Britain.		
		tons.	tons.	tons.	tons.	tons.	tons.
Nova Scotia.....	1921	43,931	—	—	—	162,426	206,357
	1922	19,807	3,964	2,701	—	171,407	197,879
	1923	23,071	6,538	—	—	162,065	191,674
New Brunswick.....	1921	64,957	—	15,280	—	95,466	175,703
	1922	21,411	2,373	5,873	283	97,111	127,051
	1923	50,334	13,523	7,124	393	107,135	178,509
Prince Edward Island.....	1921	4,356	—	—	—	26,454	30,810
	1922	8,007	—	—	—	39,480	47,487
	1923	2,428	103	1,209	—	60,810	64,550
Quebec.....	1921	856,462	—	176,539	—	56,001	1,089,002
	1922	538,146	8,314	370,467	11,802	113,779	1,042,508
	1923	856,948	15,844	249,329	489	121,328	1,243,938
Ontario.....	1921	2,101,410	—	448,794	—	15,036	2,565,240
	1922	1,074,058	22,297	529,323	302	28,348	1,654,328
	1923	1,809,883	778	637,223	102	57,575	2,505,561

47.—Distribution of Coal through Retail Dealers, by Provinces, 1921-1923—concluded.

Provinces.	Years.	Anthracite Coal from		Bituminous Coal from		Canadian Bituminous, Lignite and others.	Total.
		United States.	Great Britain.	United States.	Great Britain.		
		tons.	tons.	tons.	tons.	tons.	tons.
Manitoba.....	1921	61,774	—	33,127	—	230,165	325,056
	1922	45,436	—	65,237	—	273,264	383,937
	1923	35,609	—	59,931	—	302,694	398,234
Saskatchewan.....	1921	20,411	—	2,544	—	575,855	598,810
	1922	12,985	—	2,280	—	616,378	631,643
	1923	7,092	—	828	—	575,203	583,123
Alberta.....	1921	4,219	—	252	—	372,000	376,471
	1922	1,281	—	27	—	343,389	344,697
	1923	244	—	153	—	364,344	364,741
British Columbia.....	1921	3,601	—	1,128	—	289,527	294,256
	1922	3,994	—	10,716	—	356,256	370,966
	1923	287	—	4,242	—	332,488	337,017
Canada.....	1921	3,161,121	—	677,664	—	1,822,937	5,661,715
	1922	1,725,125	36,948	986,624	12,387	2,039,412	4,890,496
	1923	2,785,896	36,786	960,039	984	2,083,642	5,867,347

48.—Yearly Average Retail Prices of Coal in Canada by Principal Municipalities, 1921-1923.

Province and Municipality.	Anthracite.			Bituminous.		
	1921.	1922.	1923.	1921.	1922.	1923.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
NOVA SCOTIA—						
Sydney.....	—	—	—	7 20	—	—
New Glasgow.....	—	—	—	7 75	—	—
Amherst.....	20 75	19 00	—	11 75	8 82	8 98
Halifax.....	18 75	17 14	17 95	10 59	9 59	9 66
Truro.....	18 50	—	—	11 93	10 55	10 25
PRINCE EDWARD ISLAND—						
Charlottetown.....	21 70	18 00	18 24	9 97	8 26	9 24
NEW BRUNSWICK—						
Moncton.....	18 75	19 00	19 00	11 99	10 70	9 43
St. John.....	18 60	16 57	16 71	12 61	11 21	10 25
Fredericton.....	18 70	18 09	17 80	12 72	9 13	10 49
Bathurst.....	20 46	22 00	19 50	11 68	10 39	10 82
QUEBEC—						
Quebec.....	17 38	17 81	17 99	12 64	11 42	12 27
Three Rivers.....	18 55	16 51	16 43	13 10	10 62	10 51
Sherbrooke.....	16 75	16 93	16 99	15 67	—	10 45
Sorel.....	16 30	16 36	16 10	12 52	11 06	10 33
St. Hyacinthe.....	16 09	15 47	16 27	11 95	11 58	11 50
St. Johns.....	18 00	15 76	16 63	12 00	11 73	11 15
Thetford Mines.....	19 67	—	—	—	—	—
Montreal.....	16 98	16 78	16 96	11 98	9 45	9 43
Hull.....	17 00	16 44	16 62	13 70	12 90	12 17
ONTARIO—						
Ottawa.....	16 98	16 44	17 17	12 78	11 01	10 55
Brockville.....	16 08	15 98	16 18	9 47	10 45	9 34
Kingston.....	16 50	16 61	16 46	10 93	10 64	10 21
Belleville.....	16 75	15 98	16 42	13 80	10 70	8 73
Peterborough.....	16 75	16 33	16 85	11 87	12 93	10 67
Orillia.....	16 85	16 79	16 78	12 03	12 03	10 86
Toronto.....	15 64	15 65	15 99	10 20	10 92	10 25
Niagara Falls.....	15 54	14 84	15 56	10 10	10 53	10 17
St. Catharines.....	15 90	15 49	16 81	11 29	12 90	11 60
Hamilton.....	15 93	15 65	16 47	9 92	9 15	7 90
Brantford.....	16 27	15 73	17 05	12 38	11 65	11 15
Galt.....	16 30	15 81	17 21	11 50	11 73	9 75
Guelph.....	16 39	15 83	16 99	12 15	12 16	11 51

48.—Yearly Average Retail Prices of Coal in Canada by Principal Municipalities, 1921-1923—concluded.

Province and Municipality.	Anthracite.			Bituminous.		
	1921.	1922.	1923.	1921.	1922.	1923.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
ONTARIO—concluded.						
Kitchener.....	16 35	16 11	16 96	12 43	11 43	11 70
Woodstock.....	16 35	15 76	16 77	11 78	10 70	11 50
Stratford.....	16 79	16 27	16 84	13 54	12 78	11 78
London.....	16 93	16 52	17 71	11 10	9 25	8 96
St. Thomas.....	17 50	16 58	17 74	14 17	12 68	11 26
Chatham.....	18 09	16 24	17 57	14 73	12 79	12 08
Windsor.....	18 21	16 67	17 48	13 12	11 46	10 83
Owen Sound.....	17 21	16 53	16 61	11 81	10 35	11 23
Cobalt.....	23 67	—	—	17 67	—	—
Sault Ste. Marie.....	18 39	17 41	18 12	12 64	11 07	10 99
Port Arthur.....	18 84	17 96	19 02	13 22	12 22	10 96
Fort William.....	18 78	18 25	19 12	12 97	10 65	9 45
MANITOBA—						
Winnipeg.....	21 32	21 36	21 02	14 35	12 05	12 12
Brandon.....	23 19	22 56	23 54	15 05	13 90	13 70
SASKATCHEWAN—						
Regina.....	21 63	25 16	25 15	13 20	11 85	12 19
Prince Albert.....	24 44	—	—	12 73	11 20	12 25
Saskatoon.....	24 73	25 80	25 75	13 89	11 16	12 35
Moose Jaw.....	18 17	18 45	23 75	12 54	12 21	11 78
ALBERTA—						
Edmonton.....	—	—	—	7 75	—	—
Calgary.....	12 95	13 98	—	10 10	9 39	9 30
Lethbridge.....	—	—	—	8 58	—	—
BRITISH COLUMBIA—						
Fernie.....	—	—	—	7 63	—	—
Nelson.....	16 25	17 00	—	13 17	12 78	—
Trail.....	—	—	—	11 95	12 64	11 75
New Westminster.....	15 25	—	—	14 50	10 37	11 91
Vancouver.....	17 93	20 62	—	11 50	9 20	10 17
Victoria.....	—	—	—	13 19	9 85	10 27
Nanaimo.....	—	—	—	9 20	—	—
Prince Rupert.....	—	—	—	11 90	11 83	12 26

6.—Bounties, Patents, Copyrights and Trade Marks.

Bounties.—The only bounty paid by the Dominion Government in 1923-24 was for the production of crude petroleum. Bounties on iron and steel ceased in 1911, on lead in 1918, on zinc in 1921 and on linen yarns in 1923. The total paid for lead bounties from 1899 to 1918 amounted to \$1,979,216 for 1,187,169,878 lb. of lead.¹ For crude petroleum the amount paid in 1924 was \$79,810 on 5,320,636 imperial gallons, being at the rate of 1½ cents per gallon, and making the total paid from 1905 to 1924, \$3,382,171 on 225,478,062 gallons. Zinc bounties were granted under the provisions of 8-9 Geo. V, c. 51, not to exceed \$400,000 to July 31, 1920. The bounty paid equalled the difference between the standard market price of zinc and 9c. per lb. There was paid in 1918-19 the sum of \$108,563 on 10,107,704 lb. of zinc sold; in 1919-20 there was paid \$249,246 on 15,186,694 lb. and in 1920-21 there was paid \$42,191 on 3,635,199 lb. The total amount paid was \$400,000 on 28,929,597 lb.

The total amount of bounties paid from 1896 to 1924 was \$22,932,699; of this amount \$16,785,827 was for iron and steel, \$1,979,216 for lead, \$3,382,171 for crude petroleum (Table 49), \$367,962 for manila fibre, \$400,000 for zinc and \$17,523 for linen yarns from 1921 to 1923. The Year Book of 1915, pages 459 and 460, gave

¹Statistics of bounties paid on lead are given by years on page 454 of the 1920 Year Book.

a description of the bounties that have been payable since 1883, as well as tables showing, for each commodity, the quantities on which bounties were annually paid and the amounts of such bounties for the years 1896 to 1915 inclusive.

**49.—Bounties paid in Canada on Crude Petroleum, fiscal years ended
Mar. 31, 1905-1924.**

Fiscal Years.	Quantity.	Bounty.	Fiscal Years.	Quantity.	Bounty.
	gal.	\$		gal.	\$
1905.....	23,336,478	350,047	1915.....	7,685,127	115,277
1906.....	19,410,480	291,157	1916.....	7,278,452	109,177
1907 ¹	17,770,205	266,553	1917.....	6,761,885	101,428
1908.....	26,081,139	391,217	1918.....	7,566,457	113,497
1909.....	17,379,871	260,698	1919.....	10,812,482	162,187
1910.....	13,572,587	203,589	1920.....	6,887,498	103,312
1911.....	10,706,418	160,596	1921.....	6,784,333	101,765
1912.....	9,462,380	141,936	1922.....	6,262,441	93,937
1913.....	8,616,767	129,252	1923.....	5,948,207	89,223
1914.....	7,834,219	117,513	1924.....	5,320,636	79,810
			Total.....	225,478,062	3,382,171

¹Nine months.

Patents.—Letters patent, which in England have been in the gift of the Crown from the time of the Statute of Monopolies and beyond, are in Canada a purely statutory grant and have been so from the first. The earliest Act is one of Lower Canada, passed in 1824, wherein provision is made for the granting of patent rights to inventors who are British subjects and inhabitants of the province. Upper Canada passed its Act in 1826 and Nova Scotia and New Brunswick passed theirs at later dates. After the Union, a consolidating Act was passed in 1849, applying to both Upper and Lower Canada, and the B.N.A. Act assigned the granting of patents exclusively to the Parliament of Canada. The Dominion Patent Act of 1869 repealed the provincial Acts and has formed the basis of all succeeding Acts.

The Patent Act as it now stands (13-14 Geo. V, c. 23) provides in section 7 that "Any person who has invented any new and useful art, process, machine, manufacture or composition of matter . . . not known or used by any other person before his invention thereof, and . . . not in public use or on sale with the consent or allowance of the inventor thereof, for more than two years previous to his application for patent therefor in Canada, may . . . obtain a patent granting to such person an exclusive property in such invention." The exclusive right in the patent has duration for eighteen years.

The first Canadian patent was issued under the Lower Canada Act of 1824 to Noah Cushing, of Quebec. 165 patents were granted under the Acts of Upper and Lower Canada, and under the consolidating and later Acts of the provinces of Canada 3,160 patents were granted. The growth of invention is shown by the fact that, in 1923 alone 2,021 Canadian patents, a record figure, were issued to Canadians by the Patent Office.

Applications for patents in Canada from inventors in other countries were first received in 1872. In that year the total number of applications for patents made to the Canadian Patent Office, Department of Agriculture, was 752, and the total fees amounted to \$18,652. The business of the Office has gradually continued to expand and the number of applications and total fees increased each year without a break from the beginning of the present century until the fiscal year ended March 31, 1913, when 8,681 applications were received, and the total fees amounted to \$218,125. In 1924 there were 10,441 applications with fees amounting to \$459,780, as compared with 10,806 and \$413,238 respectively in 1923. For the fiscal year ended March 31, 1924, the number of patents granted was 9,000; as compared with 12,542 in 1923, a decrease of 3,542, which, however, is accounted for by the amendment to the Patent Act, dated June 4, 1921, which extended the time limit set on the payment of fees. The result was a sharp decline in the number granted during 1922 and a corresponding increase in the following year. Of the patents of 1924, 5,860, or 65 p.c., were issued to United States inventors, 1,533 to Canadian and 855 to British patentees, while Germany with 219, and France with 164 came next in number of patents issued. Table 50 shows the distribution of the Canadian patentees by province of residence for the years 1914 to 1924.

50.—Number of Canadian Patentees, by Province of Residence, for the fiscal years ended Mar. 31, 1914-1924.

Provinces.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.	1924.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Prince Edward Island.....	2	2	3	3	3	—	9	2	4	9	7
Nova Scotia.....	39	33	21	29	18	21	29	29	22	35	41
New Brunswick.....	30	20	17	29	14	9	22	33	14	21	14
Quebec.....	278	278	237	287	220	172	312	331	276	430	312
Ontario.....	607	586	540	465	398	386	636	708	508	845	673
Manitoba.....	115	97	89	84	91	66	86	118	75	158	83
Saskatchewan.....	59	66	65	62	84	76	94	119	101	166	106
Alberta.....	46	71	60	59	61	75	116	127	96	155	123
British Columbia.....	157	126	92	72	83	70	147	177	103	202	174
Territories and Yukon.....	1	2	1	1	1	—	—	1	—	—	—
Total.....	1,334	1,281	1,125	1,091	973	875	1,451	1,645	1,199	2,021	1,533

It will be seen from the table that the more populous provinces of Ontario and Quebec obtained the largest absolute number of patents, but a calculation of the number of patentees in relation to the census population shows that, for the fiscal year 1924, the greatest relative inventiveness was displayed in British Columbia. Thus, in this province, in 1924, one patent was granted to every 3,266 persons, the other provinces, as regards the number of persons to each patent granted, being placed in order as follows: Ontario, 4,573, Alberta, 5,345, Manitoba, 7,946, Saskatchewan, 7,954, Quebec, 7,967, P. E. Island, 12,531, Nova Scotia, 13,101, and New Brunswick, 28,683.

The Commissioner of Patents reports that during the fiscal year ended March 31, 1924, the land vehicle class was still the largest single class of invention, while internal combustion motors, inventions pertaining to tillage, grain separation, wireless communication, telephony and telegraphy have also been among the more important. The coal shortage of recent years provided a stimulus to inventions connected with the use of fuel oil furnaces. Inventions in typewriters have increased considerably, many of them being directed to the elimination of noise.

51.—Statistics of Patents applied for, granted, etc., fiscal years ended Mar. 31, 1920-1924.

Classification.	Fiscal year ended March 31,				
	1920.	1921.	1922.	1923.	1924.
Applications for patents.....No.	11,198	13,446	12,274	10,806	10,441
Patents granted.....“	9,527	11,152	7,393	12,542	9,000
Certificates for renewal fees.....“	2,036	2,549	2,620	2,127	1,793
Caveats granted.....“	408	410	420	452	415
Assignments.....“	4,479	5,525	5,481	5,143	5,061
Fees received, net.....\$	294,046	344,712	380,207	413,238	459,780

Copyrights.—The first Canadian Copyright Act was passed by the Legislature of Lower Canada on Feb. 25, 1832 (2 William IV, c. 53). This Act was repealed and replaced by an Act of the Province of Canada relating to copyright passed in 1841 (4-5 Vict., c. 61) allowing copyright to any resident of the Province on depositing with the Provincial Registrar a copy of the work and printing in the work a notice of the entry. In 1842 an Imperial Act (5-6 Vict., c. 45) gave to a work first published in the United Kingdom protection throughout the Empire. As at the time the United States had no agreement with the United Kingdom as to copyrights, United States publishers reprinted in cheap editions books copyrighted in the United Kingdom, and many such books naturally found their way into Canada. By the Foreign Reprints Act of 1847 (10-11 Vict., c. 95) the Imperial Government made it possible for Canadians to secure these cheap editions on making provisions safeguarding the rights of the British authors. This was done by Canada in 1850 by an “Act to impose a Duty on Foreign Reprints of British Copyright Works” (13-14 Vict., c. 6), and the duty so imposed was continued by the first Dominion Act of 1868 (31 Vict., cc. 54 and 56), the latter Act authorizing the Governor in Council to impose a duty not exceeding 20 p.c. *ad valorem* on such reprints and to distribute the proceeds among the owners of the copyrights.

By the B.N.A. Act, exclusive legislative authority in matters of copyright was assigned to the Dominion Parliament. In 1875 an Act was passed (38 Vict., c. 88) allowing a copyright for 28 years to persons domiciled in Canada or in any British possession, or who, being citizens of any country having an international copyright agreement with the United Kingdom, had registered their claim and complied with the usual conditions.

In 1886 an International Copyright Act (49-50 Vict., c. 33) was passed by the Imperial Parliament, giving to Queen Victoria the right to accede to the Berne Convention. As Canada thus became a member of the Berne Convention, with

the privilege of withdrawal, books published in Canada by Canadians secured the same privileges as books published first in the United Kingdom, an author of any country subscribing to the Convention obtaining in any other country in the union the same rights as an author of that country. An Imperial Act of 1911 set forth general copyright regulations for the Empire.

The Copyright Act of 1921 (as amended by the Act of 1923), which became effective on Jan. 1, 1924, sets down in section 4 the qualifications for a copyright and in section 5, its duration. "Copyright shall subsist in Canada . . . in every original literary, dramatic, musical and artistic work, if the author was at the date of the making of the work a British subject, a citizen or subject of a foreign country which has adhered to the (Berne) Convention and the Additional Protocol . . . or a resident within His Majesty's Dominions. The term for which the copyright shall subsist shall, except as otherwise expressly provided by this Act, be the life of the author and a period of fifty years after his death." Section 13 provides that if at any time the owner of the copyright fails to print the book in Canada and satisfy the reasonable Canadian demand therefor, anyone may apply for a license to the Minister administering the Act, who may, if the owner fails to print an edition, grant a license to the applicant on the latter paying a royalty to the owner.

Copyright protection is extended to records, perforated rolls, cinematographic films or other contrivances by means of which a work may be mechanically performed. The intention of the Act is to enable Canadian authors to obtain full copyright protection throughout all parts of His Majesty's Dominions, foreign countries of the Copyright Union and the United States of America, as well as in Canada.

This Act, as amended by c. 10 of 1923, restricting the "licensing sections" to citizens of Canada and subjects or citizens of countries which do not belong to the International Copyright Union, came into force on January 1, 1924, and repealed all Imperial Copyright Acts as far as operative in Canada and all existing Canadian copyright statutes.

**52.—Statistics of Copyrights, Trade Marks, etc., fiscal years ended
Mar. 31, 1920-1924.**

Classification.	Fiscal year ended March 31,				
	1920.	1921.	1922.	1923.	1924.
Copyrights registered.....No.	2,028	1,729	1,465	1,591	1,758
Certificates of copyright....."	201	174	244	217	567
Trade marks registered....."	1,735	2,128	2,609	2,521	2,202
Industrial designs registered....."	186	316	384	330	407
Timber marks registered....."	22	58	20	17	17
Assignments registered....."	320	624	570	413	989
Fees received, net.....\$	60,451	63,175	74,679	71,241	68,847

VII.—TRANSPORTATION AND COMMUNICATIONS.

Canada is a country of magnificent distances, nearly 4,000 miles in length from east to west, with its relatively small population of 8,788,483¹ in the main thinly distributed along the southern borders of its vast area. Different parts of the country are shut off from each other by areas which are almost wildernesses, such as the region lying between New Brunswick and Quebec, and the areas north of lakes Huron and Superior, the latter dividing the industrial region of Ontario and Quebec from the agricultural areas of the prairies. To such a country with such a population, producing, like our western agriculturists, mainly for export, or, like our manufacturers, largely for consumption in distant portions of the country itself, cheap transportation is a necessity of life. Before 1850, when the water routes were the chief avenues of transportation and these were closed by ice for several months, the business of the central portions of the country was during the winter in a state of stagnation or hibernation. The steam railway was therefore required for the adequate economic development of Canada, more particularly for linking up with the economic and industrial world the vast productive areas of the Canadian West, and thus promoting their development. The construction of the Canadian Pacific railway gave to Canada, as an economic unit, length; the building of the newer transcontinental railways has helped to give the country breadth—a fact which in another ten years, as settlement fills the extensive areas thus opened up, will be more evident than it is to-day.

Railway transportation, though in many parts of the country essential, is nevertheless expensive, particularly in these last few years, and for bulky and weighty commodities. Hence new enterprises have either been undertaken or are under consideration for improving water communication, such as the new and deeper Welland canal, the deepening of the St. Lawrence canals and of the channel between Montreal and Quebec, and the possible utilization of the Hudson Bay route for the transportation of western grain to the British and continental European markets.

Problems of transportation are, therefore, of vital importance in the economic life of Canada, occupying a large part of the time and thought of our Parliaments and public men. Scarcely less important, from the social and from the economic point of view, is the development of methods of communication, in a country so vast and so thinly peopled. The post office has been a great, though little recognized factor, in promoting solidarity among the people of different parts of the Dominion, while telegraphs and telephones have gone far to annihilate distance, the rural telephone, in particular, having been of great social and economic benefit in country districts. That the use of the automobile has also been of great benefit in promoting social intercourse among the dwellers in rural districts is evidenced by the fact that in Ontario alone, 75,583 passenger cars were owned by farmers in 1923. The press, again, assisted by cheap telegraph and cable rates, and reaching through the mails all over the country, has been of great use in developing national sentiment. To sum up, it may be said that the progress of modern inventions, not least among which is the radiophone, has immeasurably improved social conditions in both rural and urban communities throughout the Dominion.

¹ Census of 1921.

In the introductory section is included a statement of the tendencies toward monopoly which have made it necessary to establish a measure of Government control over those transportation and communication agencies which are not Government-owned and operated; to this is added an account of the origin and functions of the Board of Railway Commissioners. The subsequent sub-sections deal in order with steam railways, electric railways, express companies, roads, motor vehicles, air navigation, canals, shipping, telegraphs, telephones and the post office.

I.—GOVERNMENT CONTROL OVER AGENCIES OF TRANSPORTATION AND COMMUNICATION.

Private enterprises engaged in the transportation and communication business have in the past fifty years shown in Canada the same tendency toward consolidation and amalgamation which has been evident elsewhere throughout the civilized world. The basic reason for such consolidation and amalgamation has been the fact that the business of transportation and communication is, generally speaking, a "natural monopoly," *i.e.*, a type of enterprise in which service can be more efficiently and economically rendered to the public where one or a few concerns control a particular type of service throughout the country. The outstanding example of these consolidations in Canada is the concentration of the control of the railways of the country in the hands of the Canadian Pacific Railway and the Canadian National Railway companies.

However, since such control brings with it an element of monopoly and possible overcharge which is distasteful to the public, it has in Canada, as in other countries, been deemed advisable to set up controlling authorities over the rates to be charged and the other conditions on which services to the public are to be rendered by common carriers. This control, so far as railways within the sphere of action of the Dominion Government are concerned, has been placed in the hands of the Board of Railway Commissioners, whose authority has been in recent years extended to cover various other means of transportation and communication. A brief summary of the history and the functions of this body follows.

Besides the Board of Railway Commissioners, dealing with the larger public utilities coming under the jurisdiction of the Dominion Government, there also exist in several of the provinces bodies which undertake among their duties the supervision and control of local public utilities, operating under the jurisdiction of the provinces, and the regulation of their rates of service. Among these is the Railway and Municipal Board of Ontario, established in 1906, which controls the construction, operation and maintenance of railways and the approving of their rates and their rules and regulations affecting the public. Similarly in Quebec, a Commission of Public Utilities was established in 1909 and was given superintendence over all Quebec corporations other than municipalities "that own, operate, manage or control any system, works, plant or equipment for the conveyance of telegraph or telephone messages or for the conveyance of travellers or goods over a railway, street railway or tramway, or for the production, transmission, delivery or furnishing of heat, light or power, either directly or indirectly to or for the public." In Nova Scotia there is also a Board of Commissioners of Public Utilities, and in Manitoba there is a Public Utilities Commission, with similar functions, while in the three other western provinces these same duties are performed by provincial Departments of Railways.

The Board of Railway Commissioners for Canada.

In the early days of railway building in Canada, the provinces were more concerned with rapid development than with rate regulation. Under the Railway Clauses Consolidation Act of 1851, rates were fixed by the directors of the railway, subject to the approval of the Governor in Council. Beyond this, competition was relied upon to bring rates to a reasonable level. As time went on, however, those who believed in the efficacy of competition as a regulator were disillusioned. For example, complaints were made that the Grand Trunk gave low through transit rates, say from Chicago to New York, through Canada, and recouped itself by high non-competitive rates in Upper Canada. In 1888 the supervision of rates was given to the Railway Committee of the Privy Council, sitting in Ottawa.

At the turn of the century, two reports were prepared for the Department of Railways and Canals by Professor S. J. McLean, the first setting down the experience of railway commissions in England and the United States, and the second discussing Canadian rate grievances, with a recommendation that regulation by commission be adopted in Canada. The second report found that non-competitive rates were exorbitant as compared with competitive ones and that the railways had exercised their right to vary rates without notice, to the great distress of shippers. Among the weaknesses of the Railway Committee as a rate-regulating body was its fixed station at Ottawa, which made the cost of appearing before it practically prohibitive. Besides, Members of Parliament had no necessary aptitude for dealing with railway rates, and of their two functions—legislative and administrative—the legislative was to them the more important.

The Board of Railway Commissioners for Canada, as provided for by the amended Railway Act of 1903, was organized on February 1, 1904. In the beginning, its membership consisted of a Chief Commissioner, a Deputy Chief and one Commissioner. In 1908 the membership was increased by the inclusion of an Assistant Chief Commissioner and two other Commissioners. According to the Act, the Board may be divided into two sections of three, but since any two members constitute a quorum, two commissioners usually hear all but the more important cases, and, agreeing, give the decision of the Board.

The powers of the Commission, in brief, are in matters relating to the location, construction and operation of railways. The most important of these powers has to do with rate regulation. Passenger rates are divided into standard and special, freight rates into standard, special and competitive. Standard rates are maximum rates and the only ones which must be approved by the Board before they are applied. Special and competitive rates, being less than maximum rates, may be applied by railways without the Board's approval, provided that a change of rates has been advertised. But important rate adjustments usually come to the notice of the Commission, for the changed rate alters the extent of the territory in which a shipper can compete and on this account he is apt to appeal the case to the Commission. It is a knotty question to mark the boundaries of competitive areas—to decide whether Nova Scotian manufacturers should be given rates which will allow them to compete west of Montreal, or again, whether high construction and operation costs in British Columbia should enforce a rate which prevents her goods from moving far into the prairies. By an amendment to the Railway Act, the regulation of telephone, telegraph and express rates was given to the Commission, but with narrower powers than were given to it in dealing with railways.

The procedure of the Board is informal, as suits the nature of its work, for experience has shown that hearings in strict legal form give the parties to the argument uncompromising attitudes. If possible, matters are settled by recommendations to the railway company or the shipper; thus, during 1923, 94 p.c. of the applications to the Board were settled without formal hearing. The Railway Committee had kept its station at Ottawa, giving only formal hearings, so that the grievances of those who could not afford to appear in person or pay counsel went unredressed. The itineraries of the Railway Commission are arranged so that evidence may be taken at the least expense to those giving it.

The Chief or Assistant Chief Commissioner, depending upon which one is presiding, gives final judgment on points of law when, in the opinion of the Commissioners, the question is one of law. On questions of fact the findings of the Board are final and are not qualified by previous judgments of any other court. Questions of law and jurisdiction are differentiated. In the first case, the Board may, if it wishes, allow an appeal to the Supreme Court; in the second, the applicant needs no permission to present his appeal.

The Railway Committee of the Privy Council, being a committee of the Cabinet, was responsible to Parliament. When the powers of the Committee were made over to the Railway Commission the responsibility was retained, but necessarily by a different means. There is now provision for an appeal from any decision to the Governor in Council, who may also of his own motion interfere to rescind or vary the action of the Board, but the power to rescind or vary usually consists in referring a matter to the Board for reconsideration. From its inception until Dec. 31, 1923, the Board gave formal hearing to 8,274 cases. Its decision was appealed in 83 cases, 47 of these being to the Supreme Court of Canada and 36 to the Governor-General in Council. Of the appeals (with 1 still pending), 9 of those carried to the Supreme Court were allowed and 2 of those to the Governor-General in Council.

II.—STEAM RAILWAYS.

1.—Historical Sketch.

The first Canadian railway was constructed in the year 1836, between St. Johns, Quebec, and La Prairie, with the object of shortening the journey between Montreal and New York. It was only 16 miles long and was operated by horses, for which locomotives were substituted in 1837. A second railway from Montreal to Lachine was opened in 1847, and a third line to St. Hyacinthe in 1848. In 1850, however, there were only 66 miles of railway in all Canada.

Commencement of the Railway Era—The Grand Trunk.—The railway era in Canada may be said to have begun in 1851, when an Act was passed providing for the construction of a main line of railway between the two Canadas. The result was the completion of the Grand Trunk railway between Montreal and Toronto in 1856, its extension westward to Sarnia in 1859, and eastward to Rivière du Loup in 1860. The Atlantic and St. Lawrence railway, from Portland, Maine, to the Canadian boundary, was leased for 999 years, and in 1859, on the completion of the Victoria bridge across the St. Lawrence at Montreal, the Grand Trunk had a through route 800 miles long from Portland to Sarnia. A line from Detroit to Port Huron was leased in 1859, the Champlain roads in 1863, the Buffalo and Lake Huron in 1867, while the Chicago and Grand Trunk was completed from Port Huron to Chicago in 1880. In 1881 the Georgian Bay and Lake Erie system,

with 171 miles, was incorporated, and in the following year the amalgamation with the Great Western (904 miles) took place, while the Midland system (473 miles) was also incorporated into the Grand Trunk. In 1888 the Northern railway, which had been opened from Toronto to Barrie in 1853, and the Hamilton and North-western railway, were taken over by the Grand Trunk. In 1891 the completion of the St. Clair tunnel gave direct communication with the railways of the United States. In the seventies the gauge had been changed from the original 5' 6" to the standard gauge of 4' 8½".

Construction of the Intercolonial.—The Intercolonial railway between the Maritime Provinces and Canada had been proposed as early as the thirties. In 1844 the Imperial Government made a survey for a military road, and in 1851 agreed to recommend to Parliament either a guarantee of interest or an advance of the sum required to build a railroad. Differences of opinion as to the route resulted in the project falling through, but in 1853 Nova Scotia undertook to construct by 1862 a trunk line from Halifax to the New Brunswick frontier, with branch lines to Pictou and Victoria Beach. In both Nova Scotia and New Brunswick, however, the scheme of an Intercolonial railway broke down for lack of funds, and in 1867 there were only 341 miles of railway in the Maritimes—196 miles in New Brunswick, including lines from St. John to Shediac and from St. Andrews to Richmond; 145 miles in Nova Scotia, including lines from Halifax to Truro and Windsor, and from Truro to Pictou. These, under the B.N.A. Act, passed to the Dominion Government. The latter on its part undertook the completion of the railway, and in 1876 the line was opened. In 1879 the Rivière du Loup branch of the Grand Trunk was acquired, and in 1898 the Drummond Counties railway from Chaudière Junction to Ste. Rosalie Junction was leased and running rights obtained from the latter point over the Grand Trunk tracks into Montreal, the Intercolonial thus becoming a competitor for the business of the commercial metropolis of Canada.

The First Transcontinental railway—the C.P.R.—As early as 1849 a pamphlet published by Major Carmichael-Smyth advocated the construction of a Canadian Pacific railway nearly along the present route. In 1851 a Parliamentary Committee reported against the undertaking of the enterprise at that time. In 1871 the terms under which British Columbia entered Confederation bound the Dominion to commence the Pacific railway within two years, and complete it within ten years. The building of the railway as a public work actually commenced in 1874, but was not very rapidly pushed forward. In 1880 the Government entered into a contract with the Canadian Pacific Railway syndicate, granting to the syndicate all portions of the line completed or under construction, a cash subsidy of \$25,000,000, a land grant of 25,000,000 acres, free admission of materials for construction, and protection for 20 years against competing lines. The company on its side agreed to complete the railway to a fixed standard by May 1, 1891, and thereafter to maintain it efficiently. As a matter of fact the last spike on the main line was driven on Nov. 7, 1885. Like the Grand Trunk, the Canadian Pacific railway now began to acquire small branch lines as feeders, among them being the North Shore, Quebec, Montreal, Ottawa and Occidental in 1881, the Winnipeg to Manitou line in 1882, the Ontario and Quebec, the Credit Valley and the Toronto, Grey and Bruce in 1883, the St. Lawrence and Ottawa and the Manitoba Southwestern in 1884, the North Shore, Nova Scotia, in 1885, the Atlantic and Northwest in 1886, the West Ontario Pacific in 1887, the Sudbury and Sault Ste. Marie in 1888, the New Brunswick railway, the Columbia and Kootenay in 1890 and the Montreal and Ottawa and Montreal and Lake Maskinongé in 1892.

The Second Transcontinental—the Canadian Northern railway.—The second transcontinental railway, the Canadian Northern, was begun in 1896 with the completion by Mackenzie and Mann of the 125-mile line of the Lake Manitoba Railway and Canal Company, chartered in 1889. Next were acquired the charters of the Winnipeg and Hudson Bay, the Manitoba and Southeastern, the Ontario and Rainy River, and the Port Arthur, Duluth and Western. Assisted by the Manitoba Government, which desired to establish competition with the Canadian Pacific railway, the Canadian Northern next secured the Manitoba lines of the Northern Pacific, and in 1902 completed its line from Winnipeg to Port Arthur. By securing guarantees of bonds from the Dominion and Provincial Governments it was enabled to complete the great scheme of a transcontinental road, opening up in Ontario and in the West large undeveloped areas which are now in process of settlement.

The Third Transcontinental—the Grand Trunk Pacific.—Before the continental ambitions of the Canadian Northern were generally understood, the question came up of building an additional transcontinental line. About the end of the century, the Grand Trunk began to look with envy at the large and increasing revenues drawn by the Canadian Pacific railway from the great Northwest. In 1902, the Grand Trunk submitted to the Dominion Government a proposition to construct a line from North Bay to the Pacific coast, provided that a grant of \$6,400 and 5,000 acres of land per mile should be made. The Government, in 1903, submitted a counter-proposition that the line, instead of terminating at North Bay, should be continued east to Moncton, New Brunswick, the easterly section from Moncton to Winnipeg to be constructed by the Government and leased to the Grand Trunk for a fifty-year period, the railway paying no rent for the first seven years and 3 p.c. on the cost of the railway for the remaining 43 years. The western half of the railway from Winnipeg to Prince Rupert was to be built by the Grand Trunk, the Government guaranteeing interest on bonds to 75 p.c. of the cost of construction, not exceeding \$13,000 per mile on the prairie section and \$30,000 per mile on the mountain section. This proposition was accepted and construction commenced on the National Transcontinental and the Grand Trunk Pacific.

Effect of the War on the Railways. The Drayton-Acworth Report.—With two new transcontinental main lines, besides branches, under construction, Canadian railway mileage was doubled between 1900 and 1915, increasing from 17,657 miles in the former year to 35,582 miles in the latter. The builders of the new lines, as well as the Canadian Government and people, had expected that immigration of capital and labour from Europe would rapidly settle the areas tributary to the new railroads and give them abundant and lucrative traffic, as had been the case with the C.P.R. Instead the war came, and European labour and capital were conscripted for the struggle; immigration fell off, while cost of operation increased, owing to the scarcity of labour and material in Canada. The interest on the bonds had to be met, and in 1915 the Government felt it necessary to give assistance to the railways. In 1916, after having again made a loan to the Grand Trunk Pacific railway and the Canadian Northern Railway Company, a Royal Commission was appointed by Order in Council of July 13, 1916, to investigate: (1) the general problem of transportation, (2) the status of each of the three transcontinental systems, (3) the reorganization of any of the said systems, or their acquisition by the State, and (4) other matters considered by the commission to be relevant to the general scope of the inquiry. Alfred Holland Smith of New York, Sir Henry Drayton of Ottawa and Sir George Paish of London, England,

were originally appointed to the Commission. On the resignation of the latter, William M. Acworth was appointed to take his place. The majority report of the Commission, which was signed by Sir Henry Drayton and Mr. Acworth, has formed the basis of the subsequent railway policy of Canada. Their recommendation was that the public should take control of the Canadian Northern, of the Grand Trunk Pacific and of the Grand Trunk proper, and that they should be administered on purely business principles by a Board of Trustees, such compensation as seemed proper to be decided by arbitration and given to the shareholders of the Canadian Northern and the Grand Trunk.

Origin and Growth of Government-owned Railways.

Canadian Government Railways.—The Intercolonial railway, built as a condition of Confederation and completed in 1876, and the Prince Edward Island railway, opened in April, 1875, have since their construction been owned and operated by the Dominion Government. In 1903 the Dominion Government undertook the construction of the eastern division of the National Transcontinental railway from Moncton, N.B., to Winnipeg, to be leased to the Grand Trunk Pacific Railway Company for a period of 50 years. On the failure of the latter company to take over the operation of the road when completed in 1915, the Government itself undertook its operation—capital expenditure up to Dec. 31, 1923, \$170,109,281. Thus on March 31, 1918, the Canadian Government railways had a total mileage of 5,150.08, comprising the Intercolonial railway, 2,305.23 miles; St. John and Quebec railway, leased under authority of Chapter 49 of the Statutes of 1912, 127.72 miles; Prince Edward Island railway, 313.82 miles; and National Transcontinental railway, 2,403.31 miles. Under Orders in Council of May 22, 1918, and August 30, 1918, the Moncton and Buctouche, the Elgin and Havelock, the St. Martin's railway, the York and Carleton railway and the Salisbury and Albert railway were taken over. Also, under Order in Council of December 1, 1919, the Lotbinière and Mégantic railway, under Order in Council of June 10, 1920, the Caraqueet and Gulf Shore railway, and under Order in Council of June 12, 1920, the Cape Breton railway, were incorporated in the Government railway system. The Hudson Bay railway, with 332.5 miles of steel rail at the end of 1920, and 214 miles operated out of its total length of 424 miles, has been declared to be comprised in the Canadian Government railways, and is being operated to a limited extent by the board of directors of the Canadian National Railways.

Canadian Northern Railway.—In pursuance of an Act passed in 1917 (7-8 George V, c. 24), intituled an Act providing for the acquisition by His Majesty of the capital stock of the Canadian Northern Railway Company, and an agreement entered into under the Act, the Government acquired the entire capital stock of the Canadian Northern Railway Company, except five shares issued in exchange for Canadian Northern Railway income charge convertible debenture stock. Having thus acquired control, the Government, in September, 1918, appointed a new board of directors of the Canadian Northern Railway Company. This board, under Order in Council of November 20, 1918, became also a board of management of the Canadian Government railways, with all the powers theretofore vested in the general manager of the Canadian Government railways. The use of the general term "Canadian National Railways" to describe both systems was authorized by Order in Council of December 20, 1918, the corporate entity of each system being, however, preserved. The Canadian Northern system, at the time of its acquisition by the Government, had a total mileage of 9,566.5.

The Grand Trunk Pacific.—During 1916, 1917 and 1918, the Grand Trunk Pacific received advances from the Government, totalling \$19,639,837, to enable it to "carry on" during difficult times. Towards the close of the fiscal year 1918-19, approximately \$950,000 of the \$7,500,000 authorized in the estimates of that year remained unexpended. The company desired to use this to pay interest on Grand Trunk Pacific debenture stock, but the Government insisted that deficits in operation should have priority over all other charges, and made the remittance conditional upon that understanding. As a result, the company notified the Government that it would be unable to meet the interest due on its securities on March 1, 1919. This was followed on March 4 by a notification from the company that it would be unable to continue operation of the railway after March 10. As it was necessary, in the interests of the immense territories served by the railway, to maintain the operation of the railroad, the Minister of Railways was appointed receiver from midnight of March 9, and for a time the road was operated apart from the Canadian National Railways. In October, 1920, the management was transferred to the Canadian National Railways, in connection with which system it is still being operated under receivership.

The Grand Trunk.—The desire of the parent organization, the Grand Trunk, to be relieved of its obligations in respect of the Grand Trunk Pacific, and Grand Trunk financial difficulties, led to negotiations early in 1918 for the taking over and inclusion of the Grand Trunk in the Government system of railways. These continued until October, 1919, and resulted in Chapter 13 of the 2nd Session of that year, an Act to acquire the Grand Trunk Railway system. This legislation provided for the sale and purchase of the preference and common stock, the value of which was to be determined by arbitration. On certain other stocks, namely, the 4 p.c. guaranteed stock and the debenture stocks, the Government agreed to guarantee the payment of dividends and interest, provided the voting powers exercised by the shareholders should cease on the provision of the guarantees. The guarantees were to take effect on the appointment of a committee of management representative of both the company and the Government. The committee of management, which consisted of C. A. Hayes and S. J. Hungerford, representing the Canadian National Railways, W. D. Robb and Frank Scott, representing the Grand Trunk, with President Howard G. Kelley, of the Grand Trunk, as chairman, held its first meeting on May 31, 1920, from which date the Government assumed its liability under the Act already referred to. The arbitrators appointed were Sir Walter Cassels, Chairman; Sir Thomas White, for the Government; and Hon. W. H. Taft, for the Grand Trunk. The arbitration proceedings commenced on February 1, 1921. The agreement under the Grand Trunk Acquisition Act limited the time for the completion of the arbitration proceedings to nine months from the date of the appointment of the arbitrators. The arbitrators had been appointed on July 9, 1920, and the arbitration proceedings had not been completed when the proceedings lapsed on April 9, 1921.

This difficulty led to further delay, and to reinstate the arbitration proceedings necessitated more legislation. With this in view, an Act respecting the Grand Trunk arbitration was passed and became law on May 3, 1921. This legislation provided for the reviving of the arbitration proceedings, conditional upon the resignation of the Grand Trunk English directorate, the substitution of a Canadian Board, and the establishment of the head office in Canada. The English directors resigned on May 26, and the Canadian Board was appointed, as follows: Sir Joseph Flavelle, Bart., Toronto; Howard G. Kelley, Montreal; A. J. Mitchell,

Toronto; E. L. Newcombe, K.C., Ottawa; and J. N. Dupuis, Montreal. The arbitration proceedings were revived on June 1, and the hearing finally concluded on July 8. The award was made on Sept. 7, the chairman, Sir Walter Cassels, and Sir Thomas White holding that the preference and common stocks of the Grand Trunk Company had no value in view of the financial condition of the Grand Trunk, consequent upon its Grand Trunk Pacific entanglements. Hon. W. H. Taft dissented from this finding, holding that the securities in question should be valued at not less than \$48,000,000, his contention being that the preference and common stocks would be earning dividends in five years' time. The acquisition agreement provided for an appeal on a point of law, and as the majority of the arbitrators had declined to hear evidence as to replacement value of the physical property of the system, an appeal was made to the Judicial Committee of the Privy Council. This appeal was dismissed on July 28, 1922.

Consolidation and Reorganization of the Canadian National System.—The Grand Trunk arbitration finally disposed of, steps were taken for the consolidation of the various railways under Government operation and control. By Order in Council dated August 14, 1922, the resignation of Howard G. Kelley, as Director and President of the Grand Trunk Railway Company of Canada, was accepted and Graham A. Bell appointed to the vacancy on the Board of Directors, while W. D. Robb, ranking Vice-President, was appointed Vice-President and General Manager pending reorganization. On October 4, 1922, the resignations of the Grand Trunk Board were formally accepted, and on the same date a new Board was appointed by Order in Council, to act as Directors both of the Canadian National and the Grand Trunk Railways. On October 10, the new Board met in Toronto, when the members were formally elected to the Canadian National directorate, replacing the Canadian Northern Board, whose resignations had been tendered to and accepted by the Minister of Railways.

On January 19, 1923, the whole of the preference and common stock of the Grand Trunk Railway Company was, by Order in Council, vested in the Minister of Finance in trust for His Majesty.

On January 20, 1923, an Order in Council was passed handing over to the new Canadian National Railway Board the management and operation of the Canadian Government railways, designated specifically as the Intercolonial railway, the National Transcontinental railway, the Lake Superior branch, leased from the Grand Trunk Pacific Railway Company, the Prince Edward Island railway, the Hudson Bay railway, and all other railways and branch lines vested in His Majesty, and comprising what has been known as the Canadian Government railways. This Order in Council superseded and cancelled the Order in Council of November 20, 1918, which had appointed the Canadian Northern Board to operate and manage these railways.

The unification of the Grand Trunk and Canadian National Railways was provided for by Order in Council of January 30, 1923, which also brought into effect the Act to incorporate the Canadian National Railway Company and respecting Canadian National Railways (Chap. 13, 1919). This was followed on February 5, 1923, by an Order in Council establishing the head office of the Canadian National railways at Montreal, Que.

After due consideration the new management divided the combined and reorganized National Railway system into three regions for operating purposes:—

Atlantic Region: All lines in the Maritime Provinces and as far west as, and including, Rivière du Loup, on the Intercolonial, and as far as, but not including, Monk, on the Transcontinental; headquarters, Moncton:

Central Region: All lines from Rivière du Loup and Monk, Que., to Current Junction, on the Canadian Northern, 2 miles east of Port Arthur, and to Superior Junction, on the National Transcontinental, and including the Portland line and the lines west of the Detroit river; headquarters, Toronto:

Western Region: All lines from Current Junction and Superior Junction, Ont., to the Pacific coast, including Vancouver island; headquarters, Winnipeg.

The Central Vermont, for the present, is being operated as a separate entity, with headquarters at St. Albans, Vt.

As to reorganization, Sir Henry Thornton, Chairman of the Board and President of the Canadian National railways, stated, in a communication which the Minister of Railways made to Parliament on March 27, 1923, that, when the new management took charge, about December 1, 1922, there had been three primary problems which demanded immediate attention: (1) the determination of the kind of an organization which was to be employed in the administration of the property; (2) the determination of the regions into which the property was to be divided for operating purposes and the location of regional and general headquarters; (3) the selection of officers for the various posts involved in the organization.

The organization which had been decided upon was what might be called a strengthened divisional organization, as distinguished from a departmental organization. The executive officers consist of a chairman and president, assisted by five vice-presidents, as follows:—

1. Vice-President in charge of operation, maintenance and construction;
2. Vice-President in charge of financial affairs;
3. Vice-President in charge of insurance, immigration, development, lands, express and telegraphs;
4. Vice-President in charge of legal affairs;
5. Vice-President in charge of traffic.

The above executive officers represent the minimum with which, in Sir Henry Thornton's judgment, it would be possible to operate such a property as the Canadian National railways; indeed, as time goes on and traffic increases, it would, he stated, probably be necessary to add another vice-president.

In dividing the railway into three regions for operating purposes, the principle followed had been to give to each operating region as much autonomy and local control in the actual operation of the property as was consistent with efficient principles of administration. Every effort would be made to confine the functions of the vice-presidents and the executive officers to policies, leaving to general managers, general superintendents and superintendents the responsibility of carrying out details.

Canadian National Railway Operations.—The reorganization of the National Railway Board was effected in October, 1922. The year 1923 was, therefore, the first complete year of operation of the combined and consolidated system collectively known as the Canadian National Railways and made up of the following lines:—

The Canadian Government Railways, including the Intercolonial railway and branch lines, the Prince Edward Island railway, the National Transcontinental railway, the St. John and Quebec railway (leased) and the Hudson Bay railway;

The Canadian Northern Railway System, including the Halifax and South Western railway and the Duluth, Winnipeg and Pacific railway;

The Grand Trunk Pacific railway and branch lines (in receivership);

The Grand Trunk Railway System, including the Grand Trunk Canadian lines, the Grand Trunk Western lines (American) and the Grand Trunk New England lines.

The foregoing constitute what is known as the Canadian National Railway System, with a steam operated mileage of 21,850.89 as of December 31, 1923. Of this, 20,296.12 miles were owned by constituent companies, 1,448.72 operated under lease or contract and 106.05 under trackage rights.

In addition to the system mileage above referred to there are certain steam and electric lines controlled by constituent companies, but separately operated. These include:—

The Central Vermont railway (steam), 483.47 miles; the Thousand Island railway (steam), 6 miles:

Canadian Northern electric lines:—The Toronto Suburban railway, 60.63 miles; Niagara, St. Catharines and Toronto railway, 61.77 miles; a total of 122.40 miles:

The Montreal and Southern Counties railway (electric), 52.18 miles; and the Oshawa railway (electric), 8.81 miles.

The total owned, leased or controlled mileage operated as of December 31, 1923, was, therefore, 22,523.75 miles. The foregoing is first main track mileage only. In addition there are 1,203.02 miles of second main track, 12.21 miles of third main track and 7.42 miles of fourth main track, 6,119.45 miles of spurs, sidings and yard tracks, and 274.62 miles of inactive mileage.

For convenience of operation and administration the American lines west of the Detroit river have been detached from the Central Region and are now known as Grand Trunk Western lines, with headquarters at Detroit. The mileage of the various regions is now as follows: Atlantic region, 2,760.08; Central Region, 7,830.91; Grand Trunk Western Lines, 991.69; Western Region, 10,268.21.

Excluding the electric lines, but including the separately operated Central Vermont railway, the gross operating revenues during 1923 amounted to \$263,554,436 and the operating expenses to \$242,363,974, leaving net earnings from operation of \$21,187,462, as compared with net earnings of \$3,993,237 in 1922. Before fixed charges were deducted, the net revenue was \$13,364,876. Fixed charges amounted to \$66,144,226, leaving a total deficit of \$52,779,350, as against \$58,696,912 in 1922.

Table 1 shows some of the more important train traffic statistics of Canadian National Railway operation for the years 1922 and 1923.

1.—Canadian National Railways¹ (Canadian and U.S. Lines) Train Traffic Statistics for the calendar years 1922 and 1923.²

Items.	1922.	1923.
Train Mileage—		
Passenger trains.....	22,031,878	23,241,846
Freight trains.....	31,531,857	34,073,929
Mixed trains.....	3,686,245	3,536,792
Special trains.....	49,400	27,680
Total Train Miles.....	57,299,380	60,880,247

¹ Exclusive of Central Vermont railway and electric lines.

² For detailed statistics of the operation of the Canadian National Railways during 1923, see the Annual Statement by the Minister of Railways and Canals in Hansard of May 28, 1924, and Railway Statistics, 1923, published by the Dominion Bureau of Statistics.

1.—Canadian National Railways (Canadian and U.S. Lines) Train Traffic Statistics for the calendar years 1922 and 1923—concluded.

Items.	1922.	1923.
Car Mileage—		
Passenger—		
Coaches, parlor, sleeping and dining cars.....	90,519,499	100,372,915
Baggage, mail, express, etc.....	53,805,496	56,017,555
Total Passenger Train Car Miles.....	144,324,995	156,390,470
Freight—		
Loaded freight car miles.....	708,181,997	797,189,578
Empty freight car miles.....	352,407,339	413,047,269
Caboose miles.....	31,462,018	34,419,364
Total Freight Train Car Miles.....	1,092,051,354	1,244,656,211
Passenger Traffic—		
Passengers carried (earning revenue).....	23,550,678	23,683,781
Passengers carried (earning revenue) one mile.....	1,287,308,010	1,446,779,216
Passenger train miles per mile of road.....	1,013	1,036
Average passenger journey—miles.....	54.66	61.09
Average amount received per passenger.....	\$ 1.50681	1.65874
Average amount received per passenger mile.....	\$.02757	.02715
Average number of passengers per train mile.....	56.75	60.52
Average number of passengers per car mile.....	14.55	14.62
Revenue from passengers per passenger car mile.....	\$.40116	.39711
Total passenger train earnings per train mile.....	\$ 2.43	2.48
Total passenger revenue per mile of road.....	\$ 2,529.65	2,720.55
Freight Traffic—		
Tons of revenue freight carried.....	48,322,922	57,248,338
Tons of revenue freight carried one mile.....	16,432,787,616	18,615,107,256
Total tons (all classes) freight carried one mile.....	18,224,763,456	20,949,546,218
Tons of non-revenue freight carried one mile.....	1,791,975,840	2,334,438,962
Tons of revenue freight carried one mile per mile of road.....	755,146	853,703
Tons of non-revenue freight carried one mile per mile of road.....	82,348	107,059
Total tons (all classes) freight carried one mile per mile of road.....	837,494	960,762
Average number of tons revenue freight per train mile.....	475.39	503.82
Average number of tons non-revenue freight per train mile.....	51.86	63.19
Average number of tons (all classes) freight per train mile.....	527.25	567.01
Average number of tons revenue freight per loaded car mile.....	22.48	22.75
Average number of tons non-revenue freight per loaded car mile.....	2.45	2.84
Average number of tons (all classes) freight per loaded car mile.....	24.93	25.59
Average haul, revenue freight—miles.....	311.84	302.78
Freight revenue per loaded car mile.....	\$.23228	.22637
Freight revenue per train mile.....	\$ 4.91	5.01
Freight revenue per mile of road.....	\$ 7,802.17	8,495.29
Freight revenue per ton.....	\$ 3.51352	3.23574
Freight revenue per ton mile.....	\$.01033	.00995

Quebec Bridge.—The Quebec Bridge was built by the Dominion Government to replace the structure which fell during erection in 1907. The contract for the substructure was let in 1909, and for the superstructure in 1911. The bridge was opened for traffic in October, 1917, although not entirely completed until August, 1918. It was officially opened by H.R.H. the Prince of Wales, on August 22, 1919. The main span is the longest in the world, being 1,800 feet centre to centre of piers, or 100 feet longer than that of the Forth Bridge in Scotland. The total expenditure on this structure to March 31, 1923, was \$22,640,228. The bridge is of the cantilever type and carries a double track railway and accommodation for foot traffic, but no highway. The bridge forms a connecting link in the Canadian National Railway system, and is operated as a part of it.

2.—Statistics of Steam Railways.

Statistical tables illustrating the construction and operation of steam railways in Canada up to and including the year 1923 are appended.

2.—Record of Steam Railway Mileage, June 30, 1835-1919, and Dec. 31, 1919-1923.

Years.	Number of miles in operation.	Years.	Number of miles in operation.	Years.	Number of miles in operation.	Years.	Number of miles in operation.
1835.....	—	1858.....	1,863	1881.....	7,331	1904.....	19,431
1836.....	16	1859.....	1,994	1882.....	8,697	1905.....	20,487
1837.....	16	1860.....	2,065	1883.....	9,577	1906.....	21,353
1838.....	16	1861.....	2,146	1884.....	10,273	1907.....	22,452
1839.....	16	1862.....	2,189	1885.....	10,773	1908.....	22,966
1840.....	16	1863.....	2,189	1886.....	11,793	1909.....	24,104
1841.....	16	1864.....	2,189	1887.....	12,184	1910.....	24,731
1842.....	16	1865.....	2,240	1888.....	12,163	1911.....	25,400
1843.....	16	1866.....	2,278	1889.....	12,628	1912.....	26,727
1844.....	16	1867.....	2,278	1890.....	13,151	1913.....	29,304
1845.....	16	1868.....	2,270	1891.....	13,838	1914.....	30,795
1846.....	16	1869.....	2,524	1892.....	14,564	1915.....	35,582
1847.....	54	1870.....	2,617	1893.....	15,005	1916.....	37,434
1848.....	54	1871.....	2,695	1894.....	15,627	1917.....	38,604
1849.....	54	1872.....	2,899	1895.....	15,977	1918.....	38,879
1850.....	66	1873.....	3,832	1896.....	16,270	1919.....	38,866
1851.....	159	1874.....	4,331	1897.....	16,550	1919.....	39,061
1852.....	205	1875.....	4,804	1898.....	16,870	1920.....	39,384
1853.....	506	1876.....	5,218	1899.....	17,250	1921.....	39,771
1854.....	764	1877.....	5,782	1900.....	17,657	1922.....	39,773
1855.....	877	1878.....	6,226	1901.....	18,140	1923.....	40,094
1856.....	1,414	1879.....	6,858	1902.....	18,714		
1857.....	1,444	1880.....	7,194	1903.....	18,988		

During the year 1923, 321 miles of new line were opened for operations, 1,226 miles were under contract at the close of the year and 1,012 miles of projected line had been surveyed. In addition, 36 miles of line had been completed but were not in operation.

3.—Steam Railway Mileage by Provinces, June 30, 1917-1919, and Dec. 31, 1919-1923.

Provinces.	June 30.			Dec. 31.				
	1917.	1918.	1919.	1919.	1920.	1921.	1922.	1923.
Prince Edward Island.....	278	279	279	279	279	279	278	277
Nova Scotia.....	1,422	1,428	1,432	1,435	1,438	1,452	1,451	1,447
New Brunswick.....	1,959	1,959	1,948	1,993	1,816	1,948	1,947	1,947
Quebec.....	4,734	4,791	4,860	4,877	4,941	4,971	4,979	4,919
Ontario.....	11,049	11,057	11,000	10,988	11,001	10,976	10,881	10,956
Manitoba.....	4,194	4,168	4,190	4,193	4,403	4,417	4,585	4,521
Saskatchewan.....	6,124	6,162	6,148	6,141	6,220	6,296	6,267	6,517
Alberta.....	4,444	4,273	4,285	4,354	4,474	4,557	4,680	4,784
British Columbia.....	3,885	4,247	4,238	4,287	4,325	4,376	4,374	4,395
Yukon.....	102	102	102	100	69	58	58	58
In United States.....	413	413	414	414	418	441	273	273
Canada.....	38,604	38,879	38,896	39,061	39,384	39,771	39,773	40,094

4.—Capital Liability of Steam Railways, June 30, 1876-1919, and Dec. 31, 1919-1923.

Years.	Stocks.	Funded Debt.	Total.	Years.	Stocks.	Funded Debt.	Total.
	\$	\$	\$		\$	\$	\$
1876.....	180,955,657	76,079,531	257,035,188	1900....	410,326,095	373,716,704	784,042,799
1877.....	182,578,994	79,676,382	262,255,376	1901.....	421,414,314	391,696,523	816,110,837
1878.....	191,331,707	83,710,938	275,042,645	1902.....	460,401,863	401,806,847	865,208,710
1879.....	192,674,553	81,151,628	273,826,181	1903.....	483,770,312	424,100,762	907,871,074
1880.....	189,956,177	80,661,316	270,617,493	1904.....	492,752,530	449,114,035	941,866,565
1881.....	199,527,981	84,891,313	284,419,294	1905.....	526,353,951	465,543,967	991,897,918
1882.....	214,468,465	92,487,932	306,956,397	1906.....	561,655,395	501,226,234	1,065,881,629
1883.....	209,092,615	102,134,295	311,226,910	1907.....	588,568,591	583,369,217	1,171,937,808
1884.....	285,077,822	109,310,963	394,388,785	1908.....	607,891,319	631,869,664	1,239,761,013
1885.....	312,182,162	141,370,963	453,553,125	1909.....	647,534,617	660,946,769	1,308,481,416
1886.....	317,141,948	169,359,306	486,501,254	1910.....	687,557,387	722,740,300	1,410,297,687
1887.....	324,128,738	194,801,553	518,930,291	1911.....	749,207,687	779,181,514	1,528,689,201
1888.....	327,493,822	228,617,728	556,111,610	1912.....	770,459,351	818,478,175	1,588,937,526
1889.....	332,559,672	251,675,226	584,234,898	1913.....	918,573,749	613,256,952	1,531,830,692
1890.....	338,177,386	330,785,546	668,962,932	1914.....	1,026,418,123	782,402,638	1,808,820,761
1891.....	339,709,786	292,201,654	632,061,440	1915.....	1,024,085,983	851,724,905	1,875,810,888
1892.....	344,400,282	305,120,200	649,520,482	1916.....	1,024,264,325	868,861,449	1,893,125,774
1893.....	371,877,287	307,225,888	679,103,175	1917.....	1,089,114,875	896,005,116	1,985,119,991
1894.....	361,760,508	327,003,803	688,764,311	1918.....	1,093,835,495	905,994,999	1,999,880,494
1895.....	361,449,590	330,785,546	692,235,136	1919.....	1,100,301,195	914,823,515	2,015,124,710
1896.....	361,075,340	336,137,601	697,212,941	1919.....	1,104,409,122	931,756,484	2,036,165,606
1897.....	367,611,018	348,834,086	716,445,134	1920.....	1,323,705,962	846,324,166	2,170,030,128
1898.....	378,151,793	354,946,865	733,098,655	1921.....	1,372,545,165	792,142,471	2,164,687,636
1899.....	391,300,360	362,053,495	753,353,855	1922.....	1,415,623,322	743,653,809	2,159,277,131
				1923.....	1,385,080,426	1,879,593,612	3,264,674,038

¹Includes all government loans to railways and investment in road and equipment of government rail-ways and three coal railways.

Financial statistics of Canadian railways illustrate numerous difficulties attending their operation during past years. The high rates which prevailed during 1920 and part of 1921 offset materially the universally high costs of operation during these years. In 1922 and 1923, however, with rates considerably lower than during the previous years, reductions in wage bills have been essential, and these, with decreased cost of materials and increasing traffic density, have enabled the railways to keep expenses on the whole below those of 1921 and well below those of 1920, and to show, generally, surpluses from operation. Gross earnings in 1923 show an increase of almost \$38,000,000 from the previous year, while operating expenses increased by only \$20,000,000.

5.—Mileage, Capital Liability, Earnings and Operating Expenses of Steam Railways for the calendar year 1923.

Name of Railway.	SingleTrack Mileage.	Capital Liability.	Gross Earnings.	Operating Expenses.
	Miles.	\$	\$	\$
Alberta and Great Waterways.....	283-21	7,450,000	223,060	352,847
Algoma Central and Hudson Bay.....	346-20	20,398,800	2,186,148	2,059,987
Algoma Eastern.....	85-41	5,520,000	1,143,358	723,000
Atlantic, Quebec and Western.....	104-50	6,598,675	244,718	287,368
Brandon, Saskatchewan and Hudson Bay.....	69-45	2,150,000	75,815	177,098
British Yukon.....	90-32	4,978,879	163,647	119,734
Canada and Gulf Terminal.....	38-10	1,740,000	110,585	87,086
Canada Southern.....	380-55	37,630,000	24,075,645	15,506,237
Canadian National.....	20,573-79	2,207,502,645	216,578,176	204,921,713
Canadian Pacific.....	13,563-90	677,582,428	192,827,930	155,040,207
Central Canada.....	72-12	3,535,931	59,442	136,336
Central Vermont.....	25-33	2,161,915	415,291	499,068
Crows Nest Southern.....	74-18	4,295,000	220,664	261,083
Cumberland Railway and Coal Co.....	32-00	1,871,182	228,333	200,965
Detroit River Tunnel.....	3-26	21,000,000	-	-

5.—Mileage, Capital Liability, Earnings and Operating Expenses of Steam Railways for the calendar year 1923—concluded.

Name of Railway.	Single Track Mileage.	Capital Liability.	Gross Earnings.	Operating Expenses.
	Miles.	\$	\$	\$
Dominion Atlantic.....	288-36	8,431,000	2,031,334	1,874,116
Eastern British Columbia.....	14-00	420,000	24,935	64,025
Edmonton, Dunvegan and British Columbia.....	407-08	12,066,925	890,201	866,541
Essex Terminal.....	21-00	1,120,000	263,648	191,944
Esquimalt and Nanaimo.....	199-20	7,332,000	1,614,419	991,840
Fredericton and Grand Lake.....	31-10	605,000	194,241	121,245
Greater Winnipeg Water District.....	92-00	1,784,432	81,416	104,204
Hereford.....	53-06	1,600,000	118,285	249,892
International Bridge and Terminal Co.....	2-58	300,000	—	—
Inverness Railway and Coal Co.....	60-91	2,176,546	201,796	262,290
Kent Northern.....	29-00	53,986	34,184	43,198
Kettle Valley.....	376-38	15,960,000	1,180,036	1,443,501
Lacombe and North Western.....	49-39	1,949,015	53,846	56,448
Lake Erie and Detroit River.....	—	4,400,000	—	—
Lake Huron and Northern Ontario.....	—	1,190,000	—	—
Maine Central.....	5-10	88,934	23,631	25,535
Manitoba Great Northern.....	91-92	2,066,000	49,547	133,191
Maritime Coal and Ry. Co.....	16-47	3,783,600	135,175	114,238
Massachusetts Valley.....	35-48	800,000	325,244	447,354
Midland Railway of Manitoba.....	6-40	4,800,000	462,748	620,604
Montreal and Atlantic.....	184-60	4,265,000	1,815,444	1,708,167
Morrissey, Fernie and Michel.....	10-85	1,263,000	130,466	111,499
Napierville Junction.....	28-45	600,000	689,125	379,557
Nelson and Fort Sheppard.....	54-84	2,846,800	101,870	172,905
New Brunswick Coal and Ry. Co.....	59-20	—	78,850	108,233
New Westminster Southern.....	3-72	600,000	—	—
Ottawa and New York.....	56-81	2,100,000	358,537	495,564
Pacific Great Eastern.....	361-20	58,678,762	436,049	660,514
Père Marquette (in Canada).....	199-04	3,000,000	5,449,103	3,574,397
Quebec Central.....	295-53	11,075,010	3,110,441	2,456,604
Quebec Oriental.....	100-00	2,226,262	302,243	279,012
Quebec Ry., Light and Power Co.....	28-60	—	196,521	199,276
Quebec, Montreal and Southern.....	190-78	7,000,000	680,490	867,102
Roberval and Saguenay.....	37-00	2,630,000	318,676	235,689
Rutland and Noyan.....	3-36	200,000	8,578	8,993
St. Lawrence and Adirondack.....	46-14	2,155,567	1,200,227	892,792
Sydney and Louisburg.....	79-14	4,008,589	1,732,713	1,564,614
Témiscouata.....	123-60	4,099,669	464,616	365,718
Timiskaming and Northern Ontario ¹	371-50	27,511,708	5,179,702	4,188,686
Thousand Islands.....	6-08	60,000	82,031	56,644
Toronto, Hamilton and Buffalo.....	99-95	9,792,500	2,910,527	2,098,119
Van Buren Bridge Co.....	1-07	500,000	—	—
Vancouver, Victoria and Eastern.....	230-75	23,500,000	837,996	938,327
Wabash Ry. Co. in Canada.....	—	—	6,016,343	4,517,507
Total.....	40,093-96	3,264,674,038	478,333,047	413,862,818

¹ Constructed and operated by Ontario Government Commission.

The railways as a whole reduced the operating ratio from 89·39 p.c. in 1922 to 86·52 p.c. in 1923 and increased net operating revenues by \$17,715,507 by a total increase of \$37,650,919 in gross earnings, against a total increase in operating expenses of \$19,935,412. Almost ten million more tons of freight were carried, and the ton miles increased by 12 p.c., while revenues showed an increase of \$21,478,331. With a slight increase in the number of passengers carried, passenger revenues increased by over \$12,000,000. Maintenance of way and structures increased by \$3,613,449, while maintenance of equipment decreased by \$1,559,232; traffic expenses increased by \$1,235,215, transportation expenses by \$14,255,112 and general expenses by \$2,390,818. The year thus shows a marked contrast to 1922 in the matter of railway finances. While expenses have increased, this has been offset by a comparatively larger increase in receipts due to heavier freight traffic, though at lower rates, and to slightly increased passenger traffic combined with longer average passenger journeys.

6.—Steam Railway Statistics, years ended June 30, 1901-1919, and for calendar years 1919-1923.

Years.	Miles in operation.	Total Train miles.	Passengers carried.	Freight carried.	Gross Earnings.	Operating Expenses.	Ratio of expenses to receipts.
	No.	No.	No.	Tons.	\$	\$	p.c.
1901.....	18,140	53,349,394	18,385,722	36,999,371	72,898,749	50,368,726	69-06
1902.....	18,714	55,729,856	20,679,974	42,376,527	83,666,503	57,343,592	68-54
1903.....	18,988	60,382,920	22,148,742	47,373,417	96,064,527	67,481,524	70-25
1904.....	19,451	61,312,002	23,640,765	48,097,519	100,219,436	74,563,162	74-40
1905.....	20,487	65,934,114	25,288,723	50,893,957	106,467,198	79,977,573	75-12
1906.....	21,353	72,723,482	27,989,782	57,966,713	125,322,865	87,129,434	69-52
1907.....	22,452	75,115,765	32,137,319	63,866,135	146,738,214	103,748,672	70-70
1908.....	22,968	78,637,526	34,044,992	63,071,167	146,918,314	107,304,143	73-04
1909.....	24,104	79,662,216	32,683,309	66,842,255	145,056,336	104,600,084	72-11
1910.....	24,731	85,409,241	35,894,575	74,482,866	173,956,217	120,405,440	69-22
1911.....	25,400	89,716,533	37,097,718	79,884,282	188,733,494	131,034,785	69-43
1912.....	26,727	100,930,271	41,124,181	89,446,331	219,403,753	150,726,540	68-70
1913.....	29,304	113,437,208	46,185,968	106,992,710	256,702,703	182,011,690	70-90
1914.....	30,795	107,895,272	46,702,280	101,393,989	243,083,399	178,975,259	73-63
1915.....	35,582	93,218,479	46,322,035	87,204,838	199,843,072	147,731,099	73-92
1916.....	37,434	111,075,890	43,503,459	100,659,088	261,888,654	180,542,259	68-94
1917.....	38,604	115,797,100	48,106,530	121,916,272	310,771,479	222,890,637	71-72
1918.....	38,879	109,857,560	44,948,638	127,543,687	330,220,150	273,955,436	82-96
1919.....	38,896	103,332,835	43,754,194	116,699,572	332,976,901	341,866,509	89-27
1919 (Dec. 31).....	39,061	107,053,735	47,940,456	111,487,780	408,598,361	376,789,093	92-22
1920 (").....	39,384	117,384,819	51,318,422	127,429,154	492,101,104	478,248,154	97-18
1921 (").....	39,771	104,652,167	46,793,251	103,131,132	458,008,891	422,581,205	92-26
1922 (").....	39,773	107,625,144	44,383,620	108,530,518	440,687,128	393,927,406	89-39
1923 (").....	40,094	114,010,698	44,834,337	118,289,604	478,338,047	413,862,818	86-52

7.—Earnings and Operating Expenses of Steam Railways per mile of line and per train mile, for the years ended June 30, 1914-1919, and for calendar years 1919-1923.

Years.	Per mile of line.			Per train mile.		
	Gross Earnings.	Operating Expenses.	Net Earnings.	Gross Earnings.	Operating Expenses.	
	\$	\$	\$	\$	\$	
1914.....	7,893-60	5,811-83	2,081-77	2-253	1-659	
1915.....	5,616-41	4,151-57	1,464-84	2-144	1-585	
1916.....	6,943-00	4,823-00	2,120-00	2-358	1-623	
1917.....	8,051-00	5,774-00	2,277-00	2-683	1-925	
1918.....	8,493-54	7,046-00	1,447-54	3-006	2-494	
1919.....	9,846-18	8,789-00	1,057-18	3-683	3-292	
1919 (Dec. 31).....	10,461-32	9,645-00	816-32	3-817	3-520	
1920 (").....	12,495-00	12,143-00	352-00	4-192	4-074	
1921 (").....	11,516-00	10,625-00	891-00	4-376	4-038	
1922 (").....	11,080-06	9,904-00	1,176-06	4-095	3-660	
1923 (").....	11,930-41	10,332-00	1,608-41	4-196	3-630	

8.—Distribution of Operating Expenses of Steam Railways for the calendar years 1920-1923.

Items of Expenditure.	1920.		1921.		1922.		1923.	
	\$	p.c.	\$	p.c.	\$	p.c.	\$	p.c.
Ways and structures.....	100,186,413	20-95	88,268,355	20-89	79,887,565	20-28	83,501,064	20-18
Equipment.....	115,613,430	24-17	97,447,141	23-06	93,814,326	23-82	92,255,094	22-29
Traffic expenses.....	9,648,506	2-02	11,302,676	2-67	12,925,589	3-28	14,160,804	3-42
Transportation.....	233,473,462	48-82	209,583,746	49-60	191,009,121	48-49	205,264,233	49-60
General expenses.....	19,326,343	4-04	15,979,287	3-78	16,290,805	4-13	18,681,623	4-51
Total	478,248,151	100-00	422,581,205	100-00	393,927,406	100-00	413,862,818	100-00

9.—Summary Analysis of Statistics of Passenger and Freight Services and Receipts, 1914-1923.

PASSENGERS.

Years ended June 30.	Number of Passengers carried.	Number of Passengers carried one mile.	Number of Passengers carried one mile per mile of line.	Average Receipts per passenger per mile.
	No.	No.	No.	Cents.
1914.....	46,702,280	3,089,031,194	100,309	2.007
1915.....	46,322,035	2,483,708,745	69,802	2.021
1916.....	43,503,459	2,727,122,648	72,611	1.954
1917.....	48,106,530	3,150,127,428	79,829	1.946
1918.....	44,948,638	3,161,082,402	81,306	2.122
1919.....	43,754,194	3,074,664,369	79,048	2.557
1919 (Dec. 31).....	47,940,456	3,658,492,716	93,668	2.631
1920 (").....	51,318,422	3,522,494,856	89,440	2.916
1921 (").....	46,793,251	2,960,853,955	74,448	3.036
1922 (").....	44,383,620	2,814,113,531	70,754	2.820
1923 (").....	44,834,337	3,076,341,444	76,728	2.760

Years ended June 30.	Average Receipts per passenger.	Average passenger journey in miles.	Average number of passengers per train.	Passenger revenue per passenger train mile.
	\$	Miles.	No.	\$
1914.....	1.328	66	59	1.185
1915.....	1.083	54	50	1.016
1916.....	1.083	55	53	1.042
1917.....	1.140	59	59	1.160
1918.....	1.492	70	64	1.709
1919.....	1.796	70	63	2.012
1919 (Dec. 31).....	2.008	76	70	2.259
1920 (").....	2.002	68	64	2.360
1921 (").....	1.921	63	57	2.300
1922 (").....	1.790	63	55	2.100
1923 (").....	1.900	69	58	2.270

FREIGHT.

Years ended June 30.	Tons of Freight carried.	Tons of Freight carried one mile.	Tons carried one mile per mile of line.	Freight receipts per ton per mile.
	Tons.	Tons.	Tons.	Cents.
1914.....	101,393,989	22,063,294,685	716,359	0.742
1915.....	87,204,833	17,661,309,723	496,355	0.751
1916.....	109,659,088	28,195,364,264	753,202	0.653
1917.....	121,916,272	31,186,707,851	807,948	0.690
1918.....	127,543,687	31,029,072,279	798,093	0.736
1919.....	116,699,572	27,724,397,202	712,783	0.962
1919 (Dec. 31).....	111,487,780	26,950,598,322	690,015	1.003
1920 (").....	127,429,154	31,894,411,479	809,832	1.071
1921 (").....	103,131,132	26,621,630,554	669,373	1.200
1922 (").....	108,530,518	30,367,885,883	763,530	1.039
1923 (").....	118,289,604	34,067,658,527	849,695	0.987

Years ended June 30.	Receipts per ton hailed.	Average length of freight haul in miles.	Average train load in net tons.	Average number of freight tons per loaded car.	Revenue per freight train mile.
	\$	Miles.	Tons.	Tons.	\$
1914.....	1.614	217	353	19.18	2.619
1915.....	1.520	202	344	18.43	2.279
1916.....	1.679	257	411	20.91	2.686
1917.....	1.766	256	436	22.24	3.006
1918.....	1.789	243	457	23.10	3.359
1919.....	2.286	238	442	23.46	4.256
1919 (Dec. 31).....	2.427	242	434	22.21	4.358
1920 (").....	2.680	250	457	23.05	4.892
1921 (").....	3.100	258	447	22.12	5.370
1922 (").....	2.910	280	481	23.03	5.000
1923 (").....	2.840	288	502	23.42	4.950

10.—Number of Steam Railway Employees, Amount of Salaries and Wages and Ratios of the latter to Gross Earnings and Operating Expenses, for years ended June 30, 1914-1919, and for calendar years 1919-1923.

Years ended June 30.	Employees.	Salaries and wages.	Ratio to gross earnings.	Ratio to operating expenses.
	No.	\$	p.c.	p.c.
1914.....	159,142	111,762,972	45.97	62.43
1915.....	124,142	90,215,727	45.15	61.09
1916.....	144,770	104,300,647	39.82	57.95
1917.....	146,175	129,626,187	41.85	58.34
1918.....	143,493	152,274,953	46.14	55.59
1919.....	158,777	208,939,995	54.66	61.12
1919 (Dec. 31).....	173,728	233,323,074	57.10	61.92
1920 (").....	185,177	290,510,518	59.04	60.74
1921 (").....	167,627	247,756,138	54.09	58.63
1922 (").....	165,635	233,294,040	52.94	59.20
1923 (").....	178,052	253,320,005	52.96	61.21

Numerous wage adjustments during the year 1923 resulted in a net reduction in the average hourly rate of pay of employees on all railways from \$0.580 to \$0.573. With an increase in total employees, however, of 12,417 and in total hours on duty of 40,016,104, the total wage bill increased from \$233,294,040 to \$253,320,005. The greatest increases (\$2,000,000 and \$7,500,000 respectively) were in the salaries for general office superintendence and in wages for maintenance of road and equipment.

11.—Mileage and Rolling Stock of Steam Railways for the year ended June 30, 1919, and for calendar years 1919-1923.

Mileage and Equipment.	Year ended June 30.	Year ended December 31.				
	1919.	1919.	1920.	1921.	1922.	1923.
	No.	No.	No.	No.	No.	No.
Mileage and Engines.						
Miles in operation (single track).....	38,896	39,061	39,384	39,771	39,773	40,094
Miles of sidings.....	9,176	9,481	9,608	9,755	9,892	9,680
Miles of double track.....	2,543	2,547	2,590	2,629	2,608	2,591
Engines in use.....	5,879	5,947	6,030	6,027	5,955	5,897
Passenger Cars.						
First class.....	2,172	2,209	2,212	2,218	2,057	1,968
Second class.....	618	592	582	552	514	429
Combination.....	396	382	362	350	348	424
Immigrant.....	701	671	673	677	697	704
Dining.....	203	204	196	223	209	194
Parlour.....	164	162	187	173	194	223
Sleeping.....	550	548	584	645	640	675
Baggage, express and postal.....	1,513	1,584	1,479	1,807	1,803	1,859
Other.....	195	186	282	122	338	309
Freight Cars.						
Box.....	153,520	154,044	155,964	161,259	158,622	159,276
Flat.....	24,768	25,657	24,939	24,391	24,186	23,321
Stock.....	9,189	11,023	11,164	12,585	11,542	12,204
Coal.....	18,375	17,908	20,249	20,079	20,557	22,854
Tank.....	419	414	414	413	405	438
Refrigerator.....	6,022	5,591	6,204	7,012	6,463	6,504
Other.....	4,965	5,158	5,555	5,824	6,800	5,017

12.—Commodities hauled as Freight on Steam Railways during the calendar years 1921-1923.

Products.	1921.	1922.	1923.
	Tons.	Tons.	Tons.
Agricultural and Vegetable Products—			
Wheat.....	10,401,244	13,142,064	12,754,041
Corn.....	1,595,774	1,732,221	983,009
Oats.....	2,937,774	3,125,602	2,136,040
Barley.....	725,619	800,911	642,109
Rye.....	280,292	522,403	273,587
Flaxseed.....	202,902	143,777	133,097
Other grain.....	225,925	170,218	135,895
Flour.....	3,401,848	3,664,264	3,383,569
Other milled products.....	1,531,638	1,751,054	1,833,223
Hay and straw.....	944,435	1,028,835	1,045,392
Cotton.....	181,545	243,869	179,449
Apples (fresh).....	360,788	358,043	376,028
Other fruit (fresh).....	388,610	425,889	416,503
Potatoes.....	568,292	548,187	554,747
Other fresh vegetables.....	199,180	231,493	251,672
Other agricultural and vegetable products.....	779,161	661,571	659,965
Total.....	24,724,495	28,550,401	25,758,326
Animals and Animal Products—			
Horses.....	102,999	87,793	88,781
Cattle and calves.....	692,447	907,110	816,722
Sheep.....	98,305	89,776	59,502
Hogs.....	276,230	319,828	315,689
Dressed meats (fresh).....	592,459	681,498	700,091
Dressed meats (cured or salted).....	203,883	262,565	263,412
Other packing house products.....	296,688	212,573	357,966
Poultry.....	73,788	72,437	92,523
Eggs.....	148,744	156,611	168,719
Butter and cheese.....	262,070	280,247	273,672
Wool.....	70,479	75,881	72,727
Hides and leather.....	189,374	223,965	216,410
Other animals and animal products.....	133,812	121,219	128,709
Total.....	3,131,278	3,491,493	3,524,923
Mine Products—			
Anthracite coal.....	7,888,165	4,571,101	7,651,100
Bituminous coal.....	18,834,216	17,867,111	21,376,703
Lignite coal.....	434,226	261,732	348,515
Coke.....	436,911	743,767	1,202,129
Iron ore.....	218,315	355,728	594,229
Other ores and concentrates.....	966,454	1,099,793	2,290,101
Base bullion and matte.....	87,859	77,227	130,757
Clay, gravel, sand, stone (crushed).....	4,165,439	4,755,767	4,794,577
Slate, dimension or block stone.....	607,460	747,738	973,525
Crude petroleum.....	283,541	282,148	319,562
Asphaltum.....	141,864	164,894	131,574
Salt.....	352,080	436,753	402,841
Other mine products.....	422,465	595,629	581,999
Total.....	34,838,995	31,959,388	40,797,612
Forest Products—			
Logs, posts, poles, cordwood.....	2,801,149	3,187,239	3,295,349
Ties.....	558,243	269,530	260,800
Pulpwood.....	6,053,903	4,914,220	5,955,051
Lumber, timber, box shooks, heading.....	6,704,523	8,729,649	9,214,364
Other forest products.....	789,175	721,437	728,202
Total.....	16,906,993	17,522,075	19,453,766
Manufactures and Miscellaneous—			
Refined petroleum and its products.....	1,682,411	1,696,095	1,797,539
Sugar.....	762,789	941,733	763,330
Iron—pig and bloom.....	347,709	544,269	756,822
Rails and fastenings.....	325,706	347,997	319,300
Bar and sheet iron—structural iron and iron pipe.....	1,106,393	1,323,942	1,830,911
Castings, machinery and boilers.....	607,484	632,728	696,663
Cement.....	1,089,615	1,266,080	1,264,564
Brick and artificial stone.....	775,224	1,173,727	1,072,379
Lime and plaster.....	373,845	499,889	522,577
Sewer pipe and drain tile.....	118,384	140,936	100,611
Agricultural implements and vehicles other than auto's..	333,575	252,867	333,004

12.—Commodities hauled as Freight on Steam Railways during the calendar years 1921-1923—concluded.

Products.	1921.	1922.	1923.
	Tons.	Tons.	Tons.
Manufactures and Miscellaneous—concluded.			
Automobiles and auto trucks.....	544,703	922,457	1,198,499
Household goods.....	167,920	140,349	123,488
Furniture.....	94,339	105,537	89,085
Liquors and beverages.....	161,381	165,759	210,417
Fertilizers, all kinds.....	313,276	327,532	304,512
Paper, printed matter, books.....	1,662,588	2,351,194	2,522,266
Wood pulp.....	1,493,284	2,170,698	2,022,183
Fish, (fresh, frozen, cured, etc.).....	160,057	165,471	150,202
Canned meats.....	15,514	11,283	10,540
Canned goods (all canned food products other than meat)	330,315	381,437	387,910
Other manufactures and miscellaneous.....	6,223,532	6,503,678	7,893,017
Merchandise.....	4,812,177	4,610,009	4,336,655
Total.....	23,592,220	26,665,667	28,706,474
Grand Total.....	103,131,132¹	108,530,518²	118,280,604³

¹ 27,151 tons Thousand Islands Rly., not distributed.

² 41,489 tons Thousand Islands Rly., not distributed.

³ 48,503 tons Thousand Islands Rly., not distributed.

Government Aid to Private Railways.—In order that the private railways of Canada might be constructed in advance of settlement as colonization roads, or through thinly settled districts where little traffic was available, it was necessary for Dominion, Provincial and even Municipal Governments to extend some form of assistance. In our earlier history, when our Governments had plenty of Crown land and little cash, the subsidies granted to railways frequently took the form of land grants, which had the advantage of giving the railway a direct interest in opening up the country, though it sometimes led to the railways holding large tracts of land idle for speculative purposes when intermixed Crown lands had been homesteaded, thus retarding the settlement of agricultural land. Table 13 shows the areas of the land granted as subsidies to steam railway companies by the Dominion and Provincial Governments, with the names of the companies in the case of the Dominion Government. The total area so granted up to Dec. 31, 1923, amounted to 46,886,797 acres.

As the country grew wealthier, the objections to the land grant method became more apparent, and aid was more frequently given in the form of a cash subsidy per mile of line, a loan or a subscription to the shares of the railway. From 1851 up to Dec. 31, 1923, as shown analytically in Table 15, the total value of such aid granted to steam railways in Canada, exclusive of the capital of two Government railways (I.C.R. and P.E.I.R.), amounted to \$220,066,506. Of this sum \$179,396,755 represents aid granted by the Dominion Government, \$35,322,123 that granted by the Provincial Governments, and \$15,347,628 that granted by municipalities. Table 14 records the details of the most recent type of assistance given to private railways, *viz.*, by the guaranteeing of their bonds or of the interest thereupon. These guarantees enabled the railways receiving them to borrow money, generally from British investors, at rates of interest considerably lower than would otherwise have had to be paid. Up to Dec. 31, 1923, guarantees amounting to \$442,476,698 had been authorized by the Dominion and Provincial Governments, of which the total amount outstanding was \$370,620,819.

13.—Areas of Land Subsidies granted to Steam Railways by the Dominion and Provincial Governments up to Dec. 31, 1923.

By the Dominion Government.		Acres.
Alberta Railway and Coal Co.....		1,101,712
Alberta and Great Waterways Railway Co.....		2,498
Canadian Pacific Railway Co. (main line).....		18,204,049
Calgary and Edmonton Railway Co.....		1,818,017
Great North West Central Railway Co.....		320,000
Manitoba Northwestern Railway Co.....		1,500,992
Manitoba Southwestern Col. Railway Co.....		1,396,473
Saskatchewan and Western Railway Co.....		98,880
C.P.R.—Souris Branch.....		1,406,932
C.P.R.—Pipestone Extension, Souris Branch.....		200,094
Canadian Northern Railway Co.....		3,316,293
Manitoba and Southeastern Railway Co.....		679,898
Qu'Appelle, Long Lake and Saskatchewan Railroad and Steamboat Co.....		1,623,312
Edmonton, Dunvegan and British Columbia Railway Co.....		3,878
Grand Trunk Pacific Railway Co.....		10,021
Grand Trunk Pacific Branch Lines Co.....		1,789
Total by Dominion Government.....		31,684,838
By Provincial Governments.		
Nova Scotia.....		160,000
New Brunswick.....		1,788,392
Quebec.....		1,778,950
Ontario.....		3,241,207
British Columbia ²		8,233,410
Total by Provincial Governments.....		15,211,959
Total by Dominion and Provincial Governments.....		46,886,797

¹ Not including convertible land grants by the government of this province.

² Includes 4,065,076 acres repurchased from B. C. Southern and Columbia and Western railways.

14.—Railway Bonds Guaranteed by Dominion and Provincial Governments.

Governments.	Amount Authorized.	Amount Outstanding, Dec. 31, 1923.
	\$	\$
New Brunswick.....	8,028,977	8,028,977
Quebec.....	98,000	98,000
Ontario.....	7,860,000	7,859,998
Manitoba.....	25,502,873	24,389,892
Saskatchewan.....	42,900,000	17,904,062
Alberta.....	41,724,410	35,488,128
British Columbia.....	68,135,000	45,186,000
Total by Provincial Governments.....	194,249,260	138,955,057
Dominion Government.....	248,227,438¹	231,665,762¹
Grand Total.....	442,476,698	370,620,819

¹ Net, exclusive of duplication by Transfers of guarantees and by guaranteed issues held by the companies.

15.—Analysis of the Total Financial Aid given to Steam Railways up to Dec. 31, 1923.

By the Dominion Government.		By Provincial Governments.	
	\$.		\$
Cash subsidies.....	121,308,750	Cash subsidies.....	35,022,123
Loans.....	15,142,633	Subscription to shares.....	300,000
		Total.....	35,322,123
Paid to Quebec Government.....	5,160,053	By Municipalities.	
Cost of lines handed over to C.P.R.....	37,785,319	Cash subsidies.....	12,922,128
		Subscription to shares.....	2,425,500
		Total.....	15,347,628
Total.....	179,396,755	Grand Total.....	220,066,506

Tables 16 and 17, from the Annual Report of the Department of Railways and Canals, show the capital expenditure of the Dominion Government on the Canadian Government Railways and their operating finances to the end of the fiscal year 1923.

16.—Cost of Construction, Operating Expenses and Revenue of Canadian Government Railways for the fiscal years 1868-1900, 1901-1923, and before Confederation.

Years.	Capital Expendi- ture.	Operating Expenses.	Revenue.	Surplus (+) or deficit (-).
	\$	\$	\$	\$
Before Confederation.....	13,881,461	—	—	—
1868-1900.....	114,091,210	81,391,472	73,226,382	-8,165,090
1901.....	3,922,989	5,739,052	5,213,381	-525,671
1902.....	5,386,611	5,861,099	5,918,990	+57,891
1903.....	3,083,681	6,474,134	6,584,599	+110,465
1904.....	2,619,060	7,599,959	6,627,256	-972,703
1905.....	6,125,482	8,906,154	7,050,892	-1,855,262
1906.....	6,102,566	7,893,653	7,950,553	+56,900
1907 (9 mos.).....	7,174,370	6,328,746	6,509,186	+180,440
1908.....	23,684,005	9,595,295	9,534,569	-60,726
1909.....	29,414,227	9,764,587	8,894,420	-870,167
1910.....	21,505,976	9,095,904	9,647,964	+552,060
1911.....	24,532,466	10,037,879	10,249,394	+211,515
1912.....	23,108,806	11,074,853	11,034,166	-40,687
1913.....	17,375,968	12,499,926	12,442,203	-57,723
1914.....	21,628,095	13,559,225	13,394,317	-164,908
1915.....	21,865,664	12,474,454	12,149,357	-325,097
1916.....	21,155,255	19,407,380	18,427,909	-979,471
1917.....	12,003,650	25,795,907	23,539,759	-2,256,148
1918.....	34,699,417	33,400,460	27,240,957	-6,159,503
1919.....	40,193,181	43,889,626	38,013,726	-5,875,900
1920.....	11,593,148	48,194,710	41,402,061	-6,792,649
1921.....	5,096,535	43,770,971	36,814,350	-6,956,621
1922.....	4,553,638	6,326,800	2	-6,326,801
1923.....	Cr. 1,052,637	5,695,669	2	-5,695,669
Total.....	473,744,723¹	442,191,685	391,866,392	-50,325,294

¹ Less \$40,000 received from St. John city for the Carleton Branch railway=\$473,704,723. Cost of Quebec Bridge not included, nor \$18,345 miscellaneous expenditure.

² Revenue applied against operating expenses.

NOTE.—For the years 1868 to 1900, see Canada Year Book, 1916-17, page 437. For details regarding composition, ownership and management of Government Railways, see introduction to the section.

17.—Capital Expenditure on Government Railways to March 31, 1923.

Railways.	Expenditures.
Canadian Government Railways—	\$
Intercolonial Railway System—	
Canada Eastern Railway.....	819,000
Cape Breton Railway.....	3,860,679
Drummond County Railway.....	1,464,000
Eastern Extension Railway.....	1,324,043
Montreal and European Railway.....	333,943
Oxford and New Glasgow Railway.....	1,949,063
Intercolonial Railway.....	136,810,339
Total.....	146,561,667
New Brunswick and Prince Edward Island Railway.....	861,848
Prince Edward Island Railway.....	13,080,257
International Railway of New Brunswick.....	2,963,022
National Transcontinental Railway.....	169,332,474
Moncton and Buctouche Railway.....	293,067
Salisbury and Albert Railway.....	447,038
St. Martin's Railway.....	308,265
Elgin and Havelock Railway.....	138,559
York and Carleton Railway.....	61,703
Quebec and Saguenay Railway.....	7,772,911
Caraquet and Gulf Shore Railway.....	721,817
Lotbinière and Mégantic Railway.....	368,408
Cape Breton Railway extension.....	112,169
Hudson Bay Railway.....	14,359,941
Canadian Government Railways (rolling stock).....	35,952,931
Quebec Bridge.....	22,640,228
Total.....	415,976,305
Other Railways and Miscellaneous—	
Canadian Northern Railway.....	10,000,000
Annapolis and Digby Railway.....	660,683
European and North American Railway.....	88,363
Nova Scotia Railway.....	208,510
Carleton Branch Railway.....	48,410
Canadian Pacific Railway.....	62,790,025
Hudson Bay Railway—Port Nelson Terminals.....	6,217,792
Yukon Territory Works, Stikine-Teslin Railway.....	283,324
Governor-General's Cars.....	71,539
Miscellaneous expenditure.....	18,345
Grand Total Capital Expenditure.....	496,363,296

Railway Accidents.—The number of passengers, employees and others killed and injured in steam railway accidents from 1914 to 1923 is given in summary form in Table 18, and in a detailed analysis for 1921 to 1923 in Table 19. Attention is directed to the great reduction since 1914 in the number killed and to the increase in the number injured. It is probably the case that injuries are much more completely reported than in the past, especially in the case of employees, in view of the workmen's compensation legislation of the provinces.

18.—Number of Passengers, Employees and others killed and injured on Steam Railways for the years ended June 30, 1914-1919, and for calendar years 1919-1923.

Years.	Passengers.		Employees.		Others.		Total.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1914.....	27	415	224	3,161	349	463	600	4,039
1915.....	17	336	115	2,573	247	362	379	3,271
1916.....	20	309	174	4,332	274	337	468	4,978
1917.....	24	438	209	4,596	219	401	452	5,435
1918.....	32	344	178	5,352	200	393	410	6,089
1919.....	36	307	174	5,432	176	412	386	6,151
1919.....	34	392	197	6,349	209	476	440	7,217
1920.....	29	481	167	7,719	197	480	393	8,680
1921.....	5	259	166	6,583	193	394	354	7,236
1922.....	11	369	122	8,361	208	517	341	9,247
1923.....	15	437	167	9,382	165	539	347	10,358

NOTE.—For the years 1888 to 1913, see Canada Year Book, 1922-23, page 635.

19.—Number of Persons Killed and Injured on Steam Railways for the calendar years 1921-1923.

(A) IN ACCIDENTS RESULTING FROM MOVEMENT OF TRAINS, LOCOMOTIVES OR CARS.

Descriptions of Persons.	1921.		1922.		1923.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Passengers.....	5	227	11	336	15	406
Employees.....	127	2,024	107	2,440	144	2,763
Trespassers.....	91	113	104	124	100	119
Non-trespassers.....	97	204	96	311	60	322
Postal clerks, expressmen, etc.....	3	24	5	45	2	35
Total.....	323	2,592	323	3,256	321	3,645
Description of Accident (Employees and Passengers)—						
Coupling and uncoupling.....	4	136	5	131	10	191
Collisions.....	9	127	9	133	9	191
Derailments.....	15	199	11	308	10	293
Pairing of trains.....	1	22	—	42	1	49
Locomotives or cars breaking down.....	—	47	—	37	—	40
Falling from trains or cars.....	15	300	22	408	24	453
Jumping on or off.....	10	260	10	268	7	339
Struck by trains, etc.....	54	89	49	111	71	160
Overhead obstruction.....	2	31	1	20	1	22
Other causes.....	22	1,040	11	1,318	17	1,431
Total.....	132	2,251	118	2,776	159	3,169

(B) IN ACCIDENTS OTHER THAN THOSE RESULTING FROM MOVEMENT OF TRAINS, LOCOMOTIVES OR CARS.

Description of Persons.	1921.		1922.		1923.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Stationmen.....	1	380	—	506	—	564
Shopmen.....	7	1,623	5	2,180	4	2,283
Trainmen and Trackmen.....	13	1,571	5	2,145	4	2,245
Other employees.....	8	985	5	1,090	15	1,527
Passengers.....	—	32	—	33	—	31
Others.....	2	53	3	37	3	53
Total.....	31	4,644	18	5,991	26	6,713

III.—ELECTRIC RAILWAYS.

The cheap and reasonably rapid conveyance of human beings is a necessity of the modern urban life which falls to the lot of an annually increasing percentage of the population of Canada. This necessity of life is supplied throughout Canada by the electric street railway, generally operated by the development of the water-powers which are so important a feature of Canadian economic life.

Historical.—Replacing the horse-car systems, used in Montreal and Toronto as early as 1861, electric street railways were first seen in operation in Canada in 1885, when a successful experimental railway was constructed and operated

at the Toronto Exhibition grounds. Before many years, their safety and convenience resulted in the discarding of the older system. An electric system 7 miles in length was opened at St. Catharines in 1887, using the double overhead trolley. This was followed by the completion of the Ottawa Electric railway in 1891, and the electrification of the Montreal and Toronto systems in 1892. The street railways of other eastern cities were generally electrified during the nineties, while in the newer western cities electricity was used from the commencement. In the cities of the East, electric street railways are generally operated by private companies under franchises from the city, while in a considerable number of cities of Ontario and the West the street railways are owned and operated by the city, a fact which is indicated in Table 23 by the word "municipal" in the name of the railway. In 1921, on the expiry of the 30-year franchise of the Toronto Street Railway Company, the line in this second largest city of Canada was taken over by the city and is now being operated by a transportation commission.

Where possible, water-power with turbine engines is used for generating purposes. Where this is not available, steam power is necessary, and although this is a more expensive method, modern devices have greatly reduced the cost per h.p. Many difficulties are met in operating the cars during the winter season, due to snow, ice and sleet. These, however, have been overcome by the use of sweepers, scrapers and plows. The single overhead trolley system has been found the most suitable and is in general use.

Great advances have been made during recent years in the construction and use of suburban or inter-urban lines, their mileage now comprising a large percentage of the total. The greater part of this track is in the Toronto, Niagara and lake Erie district, on which considerable freight traffic is carried, and on the Pacific coast, where the British Columbia Electric railway operates several hundred freight cars.

Development of Electric Railway Traffic.—Figures for the year 1893 show that 30 companies with a paid-up capital of about \$9,000,000 operated 256 miles of railway. By 1897, 35 companies made returns showing 583 miles of track, 1,156 cars, 26,431,017 miles run, 83,811,306 passengers carried and capital of \$18,727,355. In 1904, 46 companies showed 766 miles of track, 2,384 cars, 42,066,124 miles run, 181,689,998 passengers and capital of \$30,314,730. Steady increases up to 1923 show that during that year 64 companies actually in operation had 2,528 miles computed as single track, 5,035 cars, 119,374,416 miles run and 737,282,038 fare passengers carried, with a capital of \$199,069,870. The number of employees in the service of electric railways on Dec. 31, 1923, was 17,779, as compared with 18,099 in 1922. Total salaries and wages for the year 1923 were \$25,039,285, as against \$24,988,119 in 1922.

Statistics of Electric Railways.—Summary statistics of the operation of electric railways in Canada from 1901 to 1923 inclusive are given by years in Table 20. In Table 21 statistics of the mileage and equipment are given for the last four railway years, and annual statistics of the capital liability of electric railways are furnished from 1908 in Table 22. Detailed figures for all railways of the miles operated, the capital liability, the earnings, operating expenses, employees and salaries and wages, are given for 1923 in Table 23, while Table 24 gives by years from 1894 to 1923 the number of passengers, employees and others killed and injured on electric railways in Canada.

20.—Summary Statistics of Electric Railway Operation, years ended June 30, 1901-1919, and for calendar years 1919-1923.

Years.	Single Track Mileage in Operation.	Total Car Mileage.	Passengers.	Freight.	Gross Earnings.	Operating Expenses.	Ratio of Expenses to Receipts.	Number of Em- ployees.
	Miles.	Miles.	No.	Tons.	\$	\$	p.c.	No.
1901.....	552-91	31,750,754	120,934,656	287,926	5,768,283	3,435,162	59-55	-
1902.....	557-59	35,833,841	135,681,402	266,182	6,436,438	3,802,855	58-63	-
1903.....	759-36	38,028,529	155,662,812	371,286	7,253,677	4,472,858	61-83	-
1904.....	766-50	42,066,124	181,689,998	400,161	8,453,609	5,326,516	63-01	-
1905.....	793-12	45,959,101	203,467,217	510,350	9,357,125	5,918,194	63-25	-
1906.....	813-74	50,618,836	237,655,074	506,024	10,966,871	6,675,037	60-87	-
1907.....	814-52	53,361,227	273,999,404	479,731	12,630,430	7,373,251	58-38	-
1908.....	992-03	56,964,881	299,099,309	732,475	14,007,049	8,695,880	62-08	-
1909.....	988-97	60,152,846	314,026,671	852,294	14,611,484	8,885,235	60-81	10,557
1910.....	1,047-07	65,249,166	360,964,876	1,228,362	17,100,789	10,121,781	59-19	11,390
1911.....	1,223-73	72,618,806	426,296,792	1,435,525	20,356,952	12,096,134	59-42	13,671
1912.....	1,308-17	82,070,064	488,865,682	1,957,930	23,499,250	14,266,675	60-71	14,760
1913.....	1,356-63	89,005,216	597,863,801	1,845,923	28,216,111	17,765,372	62-96	16,351
1914.....	1,560-82	98,917,808	614,709,819	1,433,602	26,991,007	19,107,818	64-36	16,195
1915.....	1,590-29	96,964,829	562,302,373	1,936,674	26,922,900	18,131,842	67-35	14,795
1916.....	1,673-77	82,516,612	580,094,167	2,333,539	27,418,285	18,099,906	66-02	10,622
1917.....	1,743-54	84,073,046	629,441,997	2,497,530 ¹	30,237,664	20,098,634	66-47	11,696
1918.....	1,616-36 ¹	84,435,323 ¹	487,365,456 ¹	2,474,892	21,299,890 ¹	17,535,975 ¹	72-16 ¹	11,646 ¹
1919.....	1,696-52	106,961,607	686,124,263	2,374,612	35,696,532	26,839,071	75-18	17,242
1919 ²	1,688-78	110,206,344	749,334,380	2,691,150	40,698,586	31,385,702	77-12	16,940
1920 ²	1,698-76	114,481,406	804,711,333	2,285,886	47,047,246	37,242,483	79-16	17,341
1921 ²	1,687-37	111,576,949	719,305,441 ²	2,445,425	44,536,832	35,945,316	80-71	17,015
1922 ²	1,724-60	116,711,189	738,908,949	3,145,863	49,660,485	35,986,872	72-47	18,099
1923 ²	1,736-31	119,374,416	737,282,038	50,191,387	50,191,387	36,171,923	72-07	17,779

¹ Not including Montreal Tramways and several other units. ² Calendar year.

³ The report of the Toronto Transportation Commission for the last four months of 1921 would increase this number by about 80,000,000 or possibly bring it up to the 1920 record.

21.—Mileage and Equipment of Electric Railways for the calendar years 1920-1923.

Mileage.	1920.	1921.	1922.	1923.	Equipment.	1920.	1921.	1922.	1923.
Length of first main track.....	1,698-76	1,687-37	1,724-60	1,736-31	Passenger cars, closed	3,300	3,257	3,868	3,367
Length of second main track.....	509-35	499-58	513-22	511-32	Passenger cars, open	371	376	258	240
Total length of main track.....	2,208-11	2,186-95	2,237-82	2,247-63	Passenger cars, combination.....	667	665	103	93
Length of sidings and turnouts.....	219-14	238-79	255-96	279-94	One-man cars.....	-	-	-	563
Total, computed as single track.....	2,427-25	2,425-74	2,493-78	2,527-57	Freight cars.....	669	661	741	697
					Mail, express and baggage cars.....	44	45	38	32
					Combination pass. and baggage cars..	21	18	12	15
					Work cars.....	168	213	20	20
					Trackless trolley cars	-	-	8	8
					Total cars.....	5,240	5,235	5,048	5,035
					Busses.....	-	-	27	37
					Snow ploughs.....	60	65	65	60
					Sweepers.....	143	134	146	153
					Miscellaneous.....	107	89	278	274
					Locomotives.....	54	55	56	61
					Total equipment.....	5,504	5,578	5,620	5,625

22.—Capital Liability of Electric Railways, years ended June 30, 1908-1919, and for calendar years 1919-1923.

Years.	Stocks.	Funded Debt.	Total.	Years.	Stocks.	Funded Debt.	Total.
	\$	\$	\$		\$	\$	\$
908.....	50,295,266	37,114,619	87,409,885	1916.....	67,738,275	87,157,309	154,895,584
909.....	51,946,433	39,658,556	91,604,989	1917.....	70,606,520	90,628,219	161,234,739
910.....	58,653,826	43,391,153	102,044,979	1918.....	73,864,820	93,388,273	167,253,093
911.....	62,251,203	49,281,144	111,532,347	1919.....	93,042,368	78,852,188	171,894,556
912.....	70,829,118	52,012,828	122,841,946	1919.....	91,757,418	81,283,922	173,041,340
913.....	62,079,767	79,155,864	141,235,631	1920.....	91,321,955	79,504,449	170,826,404
914.....	66,311,098	81,284,244	147,595,342	1921.....	91,169,885	86,017,551	177,187,436
915.....	66,696,675	83,647,327	150,344,002	1922.....	76,949,185	111,309,739	188,258,974
				1923.....	76,674,185	122,395,685	199,069,870

NOTE.—The totals here given do not include \$493,346, aid paid by Governments and Municipalities.

23.—Mileage Operated, Capital, Earnings, Operating Expenses, Employees and Salaries and Wages of Electric Railways in Canada, year ended Dec. 31, 1923.

Name of Railway.	Mileage Operated.	Capital Liability.	Earnings.	Operating Expenses.	Number of Em- ployees.	Salaries and Wages.
	Miles.	\$	\$	\$	No.	\$
Brandon Municipal ¹	7-65	450,000	39,693	50,145	18	24,336
Brantford and Hamilton.....	23-19	960,000	203,665	173,177	66	95,527
Brantford Municipal ¹	21-98	600,000	174,302	135,117	73	94,506
British Columbia.....	245-34	17,708,064	5,107,490	4,021,653	2,008	3,142,010
Calais Street.....	6-45	200,000	56,528	53,315	25	29,502
Calgary Municipal ¹	66-50	2,363,174	832,717	573,398	247	418,749
Canadian Resources Development Co.....	1-75	14,843	51	795	1	300
Cape Breton Electric Co.....	30-59	2,535,000	336,991	315,720	138	180,866
Chatham, Wallaceburg and Lake Erie.....	36-73	1,455,100	125,762	131,676	45	62,556
Cornwall Street Ry. Light and Power Co.....	4-00	265,000	72,229	45,482	28	36,968
Edmonton Radial ¹	33-33	3,072,343	738,780	513,718	204	356,152
Fort William Street ¹	20-50	1,337,000	183,823	147,481	58	84,595
Grand River.....	24-36	551,000	370,855	324,983	208	231,594
Guelph Radial ¹	8-49	289,761	83,117	65,263	31	41,237
Hamilton and Dundas Street.....	6-98	200,000	54,215	67,124	37	38,479
Hamilton, Grimsby and Beamsville	22-60	385,000	175,835	203,214	83	111,750
Hamilton Radial.....	22-86	271,150	189,630	235,628	77	107,484
Hamilton Street.....	17-40	1,485,000	1,041,594	836,354	418	522,265
Hull Electric Co.....	16-54	292,000	337,521	245,404	156	201,733
International Transit Co.....	3-80	182,500	66,502	42,274	21	24,746
Kingston, Port-smouth and Catar- aqui.....	6-00	183,100	65,287	60,835	34	43,376
Kitchener and Waterloo Street ¹	4-30	241,733	118,566	85,034	36	46,832
Lake Erie and Northern.....	51-00	3,817,500	355,916	284,741	139	171,124
Lethbridge Municipal ¹	8-20	339,672	54,606	59,610	20	33,639
Lévis County.....	11-50	922,900	138,746	98,835	57	56,659
London and Port Stanley (Lessor).....	-	1,775,194	-	-	-	-
London and Port Stanley (Lessee).....	24-50	1,388,500	605,150	497,056	178	240,656
London Street.....	27-48	1,112,480	693,411	572,082	264	386,255
Moncton Tramways Co.....	2-72	1,328,400	24,152	25,872	8	7,626
Montreal Tramways.....	143-48	42,909,343	12,195,203	7,207,297	3,631	4,895,704
Montreal and Southern Counties.....	52-18	500,000	504,467	449,484	171	225,713
Moose Jaw.....	9-00	795,373	95,724	96,825	40	58,276
Nelson Municipal ¹	3-38	81,000	20,559	18,404	11	14,112
New Brunswick Power Co.....	16-30	5,461,000	417,928	309,758	146	163,256
Niagara Falls Park and River Div. (Int'l Ry.).....	11-91	600,000	183,369	205,091	56	101,308
Niagara, St. Catharines and Toronto ³	61-77	2,023,000	1,053,118	765,463	451	568,148
Niagara, Welland and Lake Erie.....	2-90	282,000	19,215	12,719	5	6,670
Nipissing Central ²	15-37	159,000	96,295	90,094	33	43,409
Nova Scotia Tramways and Power Co.....	12-63	8,338,800	551,378	444,781	229	321,317
Oshawa ³	9-13	40,000	398,824	200,414	97	133,207
Ottawa.....	26-61	1,877,200	1,751,631	1,235,727	675	887,098
Peterborough Radial ²	7-64	386,478	85,327	91,679	52	57,720
Pictou County Electric Co.....	9-20	1,130,000	92,090	68,163	41	39,818
Port Arthur Civic ¹	12-80	603,534	193,744	122,658	51	72,474
Quebec Ry. Light and Power Co. (Citadel Div.).....	20-79	6,025,670	897,806	725,945	441	504,654
Quebec Ry. Light and Power Co. (Montmorency Div.).....	28-60		326,816	272,343	241	199,966
Regina Municipal ¹	25-59	1,571,375	342,712	269,700	91	165,836
Sandwich, Windsor and Amherst- burg ¹	36-37	697,000	714,314	513,762	199	309,999
Sarnia Street.....	8-25	180,700	85,066	67,215	31	42,565
Saskatoon Municipal ¹	13-48	881,036	276,845	202,562	97	136,972
Shawinigan Falls Terminal.....	4-07	493,800	113,809	74,969	18	22,786
Sherbrooke Ry. and Power Co.....	9-39	3,727,000	88,741	92,303	67	55,972
St. Thomas Municipal ¹	6-50	106,607	25,605	39,288	9	24,580
Suburban Rapid Transit Co.....	20-99	600,000	190,017	203,638	-	-
Sudbury-Copper Cliff Suburban.....	7-90	248,100	43,255	35,214	13	19,789
Sydney and Glace Bay.....	-	859,000	-	-	-	-
Three Rivers Traction Co.....	9-00	911,700	139,097	95,533	31	32,624
Toronto Suburban ³	59-86	4,128,000	335,582	389,271	160	209,227
Toronto Transportation Commission ¹	95-65	34,645,341	11,802,617	8,164,951	3,965	6,181,481
Toronto and York Radial ¹	80-07	2,375,000	835,456	831,537	371	490,722
Waterloo-Wellington Ry.....	3-45	85,200	9,699	8,834	3	2,420

¹Municipally owned. ²Provincially owned. ³Owned by Canadian National Railways.

23.—Mileage operated, Capital, Earnings, Operating Expenses, Employees and Salaries and Wages of Electric Railways in Canada, year ended Dec. 31, 1923—concluded.

Name of Railway.	Mileage Operated.	Capital Liability.	Earnings.	Operating Expenses.	Number of Employees.	Salaries and Wages.
	Miles.	\$	\$	\$	No.	\$
Windsor, Essex and Lake Shore Rapid.....	37.35	1,750,000	290,005	222,946	81	123,433
Winnipeg, Selkirk and Lake Winnipeg.....	40.22	1,262,200	208,795	165,650	44	75,048
Winnipeg Street.....	64.54	26,630,000	3,466,706	2,552,309	1,497	1,996,606
Woodstock, Thames Valley and Ingersoll.....	10.20	340,000	27,125	20,519	13	13,094
Yarmouth Light and Power Co.....	3.00	637,000	65,312	38,886	20	19,223
Total.....	1,736.31	199,069,871	50,191,387	36,171,923	17,779	25,039,285

24.—Number of Passengers, Employees and others Killed and Injured on Electric Railways, years ended June 30, 1891-1919, and for calendar years 1919-1923.

Years.	PASSENGERS.		EMPLOYEES.		OTHERS.		TOTAL.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1894-1899.....	1	23	2	9	9	12	12	44
1900.....	—	6	—	—	2	7	2	13
1901.....	3	158	1	58	11	98	15	314
1902.....	9	410	1	33	22	120	32	563
1903.....	10	504	7	62	22	212	39	778
1904.....	10	508	3	64	40	272	53	844
1905.....	30	862	3	87	23	347	56	1,296
1906.....	11	1,085	2	127	34	441	47	1,653
1907.....	27	988	7	216	37	532	71	1,736
1908.....	18	1,156	6	188	43	539	67	1,883
1909.....	11	1,303	7	218	50	618	68	2,139
1910.....	14	1,595	13	227	68	716	95	2,538
1911.....	11	1,784	8	300	83	586	102	2,670
1912.....	16	1,950	8	442	86	736	110	3,128
1913.....	17	1,662	12	392	44	490	73	2,544
1914.....	9	1,757	13	469	42	581	64	2,807
1915.....	14	1,554	6	413	44	638	64	2,605
1916.....	18	1,905	4	305	28	819	50	3,029
1917.....	11	1,541	10	395	42	792	63	2,728
1918.....	9	1,451	12	383	56	762	77	2,596
1919.....	10	1,600	37	621	47	1,290	94	3,511
Total to June 30, 1919.....	259	23,802	162	5,009	833	10,608	1,254	39,419
Years ended Dec. 31.								
1919.....	4	1,717	29	951	58	1,505	91	4,173
1920.....	9	1,968	7	658	75	1,434	91	4,060
1921.....	5	1,110	8	609	35	666	48	2,385
1922.....	6	2,260	10	873	31	700	47	3,833
1923.....	6	2,465	11	1,652	45	790	62	4,907

IV.—EXPRESS COMPANIES.

"Express service is an expedited freight service on passenger trains." But express companies do not own the means of performing their services; they use railway facilities by virtue of contracts with the railway companies. Express companies in Canada have had close relations with the railways practically from the beginning.

The Vickers Express Company, at first, did business as a stage company in south-western Ontario. Later it conducted an express business on the Toronto, Grey and Bruce and on the Northern railways. When the Canadian Pacific railway acquired the Toronto, Grey and Bruce, the Vickers Express Company did business

for a time in the same car with the Dominion Express Company, but soon went out of existence.

The Dominion Express Company had been incorporated in 1882, with a capital stock of \$1,000,000. Between 1882 and 1904 the original shareholders assigned their stock to trustees, who thenceforth held it for the C.P.R. The transfer of the stock became evident in 1904, when, at a special meeting, the shareholders of the company increased its capital to \$2,000,000.

In 1865 the Canadian Express Company was incorporated with a nominal capital of \$500,000, of which \$275,200 was subscribed. In 1891 the Grand Trunk Railway Company purchased the capital stock for \$660,000, and thenceforth the stock of the company was held for the Grand Trunk by trustees, all of whom were directors of the railway.

The Canadian Northern Express Company was incorporated in 1902 with a nominal capital of \$1,000,000, of which \$300,000 was issued. The sum of \$5,000 was paid in cash and the remainder was issued as paid up stock. Mackenzie, Mann and Company, Limited, received all but five \$100 shares, which went to qualify directors. The connection between the railway and the express company consisted in the two companies having practically the same directors.

On the taking over of the C.N.R. and the G.T.R. by the Government and the consolidation of the Canadian National Railway system, the express business of the two companies was amalgamated under one management and from September 1, 1921, the operations of the Canadian Express Company and the Canadian National Express Company were carried on under the name of the latter.

Before 1915, an express company in Canada was not liable for delay or damage caused by anything quite beyond its control, thus maintaining itself as an entity separate from the railway company. But in 1915 this liability was qualified, and thenceforth an express company became liable for delay or injury of goods if either were caused by the railway company in whose cars the goods were being carried.

Goods are sent by express for quick transit, so that express companies do not have to compete with freight rates by rail or water. Thus in its first tariff, the Dominion Express Company, in pursuance of its contract with the C.P.R., gave a rate of $2\frac{1}{2}$ times the maximum first-class railway freight rate for the same goods carried the same distance. An express company usually pays the railway company a percentage of its gross earnings; for example, the Canadian Express Company paid the Grand Trunk 50 p.c. But the railway, by controlling the stock, has an additional revenue; and since express companies have little equipment but offices, and, therefore, have slight expenses for upkeep, the railway receives in the end practically all the profits of the express company above bare operating expenses. Express rates, like freight rates, are subject to the approval of the Board of Railway Commissioners.

Express Company Operations.—There were operating in Canada in 1923, the last year for which the statistics of the Transportation Branch of the Dominion Bureau of Statistics are available, only three distinctly Canadian express companies, viz., the Central Canada Express Co., the Dominion Express Co., and the British America Express Co., the Canadian National Express Co. having been absorbed by the Canadian National Railway system, which now carries on the express business formerly transacted by its subsidiary company and provides only certain financial statistics of its present "express department." They are organized under powers conferred by Acts of the Dominion Parliament, and their business consists in the forwarding of parcels, in the transfer of luggage and in the issue of money orders,

travellers' cheques, letters of credit and other forms of financial paper. Three other express companies situated in the United States, but consolidated during the war period, like the United States railways, under the operation of a single management appointed by the United States Government, and referred to here as "American Railway," also do business in Canada. The total liabilities of the three Canadian companies on December 31, 1923, stood at \$5,150,000.

A considerable volume of the business of express companies has, during recent years, been drawn off by the numerous motor bus and motor truck systems now in operation. Transport facilities offered by motor vehicles have proved to be of much value, and with the building of improved road systems throughout the country, further decreases in the amount of express traffic now carried by the railways over short distances may be expected.

Table 25, following, shows the operating mileage of Canadian express companies for the years 1919 to 1923, illustrating chiefly the division of business among the various concerns, and the provinces in which their systems are most highly developed. The first section of the table illustrates clearly the preponderance of mileage operated over steam railway lines, but the available statistics for the year 1923, owing to the lack of information regarding Canadian National Railway express operations, are not comparable with previous years except in parts of Tables 26 and 27.

25.—Operating Mileage of Express Companies in Canada, by Routes, by Provinces and by Companies, for the calendar years 1919-1923.

Routes, Provinces and Companies.	1919.	1920.	1921.	1922.	1923.
	Miles.	Miles.	Miles.	Miles.	Miles.
By routes over—					
Steam roads.....	40,450	40,852	40,851	42,176	18,951
Electric lines.....	399	301	304	250	137
Steamboat lines (Inland).....	2,912	2,862	2,832	3,037	1,822
Stage lines.....	57	84	81	81	64
Steamship lines (Ocean).....	—	—	16,811	16,811	14,181
Miscellaneous ¹	16,813	16,813	2	2	—
Total.....	60,631	60,912	60,911	62,357	35,155
By Provinces—					
Prince Edward Island.....	500	500	500	490	—
Nova Scotia.....	1,569	1,947	1,946	1,946	289
New Brunswick.....	2,519	2,549	2,549	2,810	665
Quebec.....	5,424	5,426	5,398	5,514	1,808
Ontario.....	11,908	11,701	11,701	11,701	5,430
Manitoba.....	4,402	4,296	4,298	4,298	2,013
Saskatchewan.....	6,148	6,168	6,219	6,269	2,822
Alberta.....	4,601	4,774	4,754	5,626	3,494
British Columbia.....	5,756	5,778	5,738	5,723	3,307
Yukon.....	669	637	669	844	844
Other.....	17,135	17,137	17,137	17,137	14,483
Total.....	60,631	60,912	60,911	62,357	35,155
By companies—					
American Railway Express Co.....	2,822	2,657	2,611	2,786	2,786
British America Express Co.....	414	414	414	414	414
Canadian Express Co.....	14,963	15,308	15,308 ³	2	2
Canadian Northern Express Co.....	8,810	8,921	2	2	2
Central Canada Express Co.....	729	729	729	763	765
Dominion Express Co.....	32,893	32,884	32,806	33,666	31,190
Canadian National Express Co. ⁴	—	—	9,043 ⁴	24,728	—
Total.....	60,631	60,912	60,911	62,357	35,155

¹ Miscellaneous mileage is almost entirely on ocean steamship lines. ² Included in the Canadian National Express Co. ³ 8 months. ⁴ 4 months. ⁵ Business now carried on by the Canadian National Railways.

In Tables 26 and 27 are given statistics of the receipts and expenses of express companies for the year ended Dec. 31, 1923, with totals shown for preceding years back to 1919. Only the most important items are given. Table 28 illustrates the amount of business transacted by these companies in the sale of money orders, travellers' cheques, etc.—one of their most valuable services to the public.

A decrease in revenue of \$1,071,633 may be noted in Table 26 when gross receipts from operation for 1923 are compared with those of the previous year, while figures of operating revenues and net earnings show losses on the year's business.

26.—Earnings of Express Companies for the calendar years 1919-1923.

Companies.	Revenue from transportation.	Money Orders, domestic.	Money Orders, foreign.	Travellers' Cheques, domestic.	Travellers' Cheques, foreign.
	\$	\$	\$	\$	\$
American Railway Express.....	2,245,254	—	—	—	—
British America Express.....	31,233	—	—	—	—
Canadian National Railways.....	12,726,615	95,688	—	2,697	—
Central Canada Express.....	83,725	—	—	—	—
Dominion Express.....	11,845,781	125,344	27,041	11,547	4,920
Total, 1923.....	26,932,608	221,632	27,641	14,244	4,920
Total, 1922.....	28,022,017	204,661	28,118	11,059	5,158
Total, 1921.....	31,767,788	241,346	41,914	16,639	5,207
Total, 1920.....	29,806,284	311,031	33,093	12,996	5,355
Total, 1919.....	24,361,681	233,502	1,089	5,162	1,076

Companies.	"C.O.D." Cheques.	Gross Receipts from Operation. ¹	Net Operating Revenue.	Gross Corporate Income.	Net Earnings.
	\$	\$	\$	\$	\$
American Railway Express.....	—	2,334,732	35,122	20,397	35,122
British America Express.....	—	31,233	4,417	4,304	4,417
Canadian National Railways.....	149,969	12,999,082	—	—	—
Central Canada Express.....	—	83,725	13,987	12,571	13,987
Dominion Express.....	120,164	12,176,928	—516,856	—548,685	—480,437
Total, 1923.....	270,133	27,625,700	—463,329	—511,412	—426,910
Total, 1922.....	270,833	28,697,333	519,025	458,568	555,181
Total, 1921.....	286,015	32,504,894	353,792	342,652	414,471
Total, 1920.....	222,521	30,512,504	—1,617,836	—1,457,806	—1,794,961
Total, 1919.....	182,473	24,933,219	—1,123,048	—	—974,281

NOTE.—"American Railway Express" includes the American Express Co., Great Northern Express Co., Wells, Fargo & Co., consolidated during the war under the operation of the United States Government.

¹ Includes miscellaneous receipts.

27.—Operating Expenses of Express Companies for the calendar years 1919-1923.

Companies.	Maintenance.	Traffic expenses.	Transportation expenses.	General expenses.	Total operating expenses.	Total privileges.	Taxes.
	\$	\$	\$	\$	\$	\$	\$
American Railway Express...	55,666	2,213	471,125	69,568	598,572	1,701,039	14,724
British America Express.....	—	1,114	6,274	3,810	11,199	15,616	181
Central Canada Express.....	133	492	25,483	1,756	27,864	41,874	1,416
Dominion Express.....	198,497	106,394	5,374,225	466,559	6,175,675	6,518,109	105,591
Total, 1923.....	254,296	110,213	5,877,107	571,693	6,813,309	8,276,638	121,912
Total, 1922.....	528,805	154,730	11,978,136	934,848	13,596,518	14,581,789	241,101
Total, 1921.....	590,985	163,289	13,791,686	1,055,229	15,601,187	16,549,915	207,558
Total, 1920.....	572,700	113,838	14,483,856	950,487	16,120,880	16,009,460	177,125
Total, 1919.....	502,452	152,003	11,758,203	814,994	13,227,652	12,936,615	166,535

23.—Business transacted by Express Companies in financial paper for the calendar years 1919-1923.

Description.	1919.	1920.	1921.	1922.	1923.
	\$	\$	\$	\$	\$
Money orders, domestic.....	52,460,478	65,289,817	47,288,611	50,217,071	27,994,599
Money orders, foreign.....	2,222,908	2,315,114	1,494,844	1,467,039	1,507,499
Travellers' cheques, domestic.....	837,093	513,242	549,846	906,928	1,028,530
Travellers' cheques, foreign.....	267,320	226,940	224,160	311,110	521,090
"C.O.D." cheques.....	18,062,985	22,413,731	222,569	18,308,877	8,608,844
Telegraphic transfers.....	208,333	162,193	226,622	110,620	180,948
Other forms.....	2,639,576	1,668,138	619,288	486,547	439,922
Total.....	76,698,693	92,589,175	71,003,454	71,808,192	40,281,432

V.—ROADS AND HIGHWAYS.

Historical.—The early roads were auxiliary to water routes as avenues of transportation. Their use became common during the summer seasons, when portages were necessary to avoid obstacles to river and lake travel, and during the winters, when ice prevented navigation and snow covered the inequalities of the ground. Even the extensive system of waterways of eastern Canada was an inadequate means of communication between points of settlement in a rapidly growing colony, and the need for overland routes manifested itself in the introduction of the system of common roads which prevailed under the feudal *régime*; and not only did the crude early roads serve the needs of the settlers, but also those of the British, French and American armies during their numerous campaigns. Regiments were frequently employed, during times of peace, in road construction in different parts of Upper and Lower Canada.

The first important highway in Canada extended along the north shore of the St. Lawrence from Quebec to Montreal, being gradually completed with the growth of the French settlement. In Upper Canada, one of the earliest roads was that from Toronto to lake Simcoe (Yonge St.), completed in 1794 under the direction of Gov. Simcoe, the work being done by the Queen's Rangers. This road not only gave access to the area north of Toronto, but also provided a more convenient route than that of the Ottawa river from the trading posts on the Upper Lakes to the centres of population along the St. Lawrence. Montreal was joined to Kingston by road in 1816, and in the following year to Toronto. Thereafter other highways from points served by water routes to inland settlements began to increase in number, as it became apparent that they were essential to the commercial life of the country as a means of transporting supplies to the settlers and of bringing their products to the central markets of the colony. The system of posts which had been established about the beginning of the nineteenth century necessitated passable routes between the various offices, and by 1827 a through road was available between Halifax and Amherstburg, comprising for the most part, the old Kempt road, the York road, Dundas street and the Baldoon road. From this trunk line of communication, branch roads extended north and south to the more important centres of population in the two Canadas.

The cost of construction of these roads was high, and travel by stage coach was tedious and costly. As late as 1850, some points in central Ontario were still inaccessible to any vehicle. Later years, however, have brought with them improved methods of construction and a resulting reduction in expenses, together with an

improvement in the wearing qualities of the more important highways. The growth of motor traffic has played a conspicuous part in the movement towards increased and improved road construction. In the older provinces of the east it has been a question of improving the existing roads and of building highways for the use of through traffic between the larger cities, while in the western provinces it has been more a matter of replacing the prairie and mountain trails with roads fit for modern tourist and freight traffic.

A table of road mileage in Canada is included. When it is considered that throughout the Dominion there are but 24 persons to every mile of road and that on an average there is one mile of road for every 9 square miles of land, the magnitude of the problem faced in the construction of these traffic routes is illustrated. A small population scattered over a large area has made this, like other transportation problems, particularly difficult of solution.

29.—Classification of Canadian Highway and Road Mileage, Mar. 31, 1924.

Provinces.	Un-improved Earth.	Improved Earth.	Gravel.	Water-bound Macadam.	Bituminous Macadam.	Bituminous Concrete.	Cement Concrete.	Total.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
Prince Edward Island.....	3,347	291	2	7	—	—	—	3,647
Nova Scotia.....	11,580	2,290	1,255	57	8	—	—	15,190
New Brunswick....	8,900	1,614	3,599	—	11	—	—	14,124
Quebec.....	29,676	11,152	2,516	1,838 ²	109	12	71	45,374
Ontario.....	18,700	11,800	22,127	11,035 ²	411	57	128	64,253
Manitoba.....	6,576	24,077	1,822	—	—	25	—	32,500 ¹
Saskatchewan.....	124,613	10,387	10	—	—	—	—	135,010 ¹
Alberta.....	14,900	44,500	—	—	—	—	—	59,400
British Columbia..	1,055	10,691	4,101	45	27	29	21	15,969
Total.....	219,347	116,802	35,432	12,982	566	123	220	385,472

¹ In addition there are estimated to be 8,000 miles of road allowance in Manitoba, 37,500 in Saskatchewan and 74,990 in Alberta.

² Includes 43 miles gravel and 56.39 miles W.B. Macadam reconstructed with Federal aid in 1923.

³ Includes 5.8 miles of W.B. Macadam reconstructed with Federal aid in 1923.

Good Roads Movements.—The building of new roads and the improvement of those already in use is a matter of such general interest that various organizations have been developed throughout the country for the purpose of advising and assisting the various governments in the work. Good roads associations, for the distribution of propaganda and the education of the public in the needs of improved highway routes, are to be found in most of the provinces, assisted by the various automobile and motor clubs. A branch of the Department of Railways and Canals directs its efforts solely to the study of highway development and construction, of the relations between the Dominion Government and the provincial Highway Departments and of the financial assistance given to the provinces for road-building.

The Canada Highways Act.—By c. 54 of the Statutes of 1919, the Dominion Parliament authorized the expenditure of \$20,000,000 for the purpose of constructing and improving the highways of Canada during the five years succeeding the passage of the Act. In its apportionment, grants of \$80,000 are made to every province during each of the five years, the remainder being allotted in proportion to their respective populations. Details as to cost, time, methods of construction, etc., of all roads built under the scheme are to be arranged between the Minister of Railways and Canals and the various provincial Government Departments. It

need scarcely be added that the co-operation and encouragement of the Dominion Government has done much to assist the building of good roads throughout the country. Table 30 illustrates the working of the Act, showing the number and extent of projected roads and some of the more important items in the expenditure entailed.

30.—Statement of Road Projects of Provinces under the Canada Highways Act, 1919, to March 31, 1924.

Provinces.	Projects under Agreement.				Dominion Aid.	
	Number of Projected Agreements.	Projected Mileage.	Estimated Sub-sidizable Cost.	Estimated Dominion Aid (40%).	Provincial Allocation under the Act.	Total Payments.
			\$	\$	\$	\$
Prince Edward Island.....	59	582	1,539,682	615,873	603,455	374,115
Nova Scotia.....	53	460	3,637,992	1,455,197	1,468,720	1,394,830
New Brunswick.....	19	1,237	2,950,600	1,180,240	1,163,845	1,107,479
Quebec.....	142	928	10,897,460	4,358,984	4,748,420	2,801,163
Ontario.....	39	638	13,424,319	5,369,727	5,877,275	4,751,688
Manitoba.....	42	1,455	3,812,201	1,524,881	1,602,265	1,074,661
Saskatchewan.....	60	1,914	4,243,601	1,697,440	1,806,255	1,098,724
Alberta.....	—	—	—	—	1,477,810	—
British Columbia.....	22	369	3,149,264	1,259,705	1,251,955	1,251,955
Total.....	436	7,583	43,655,119	17,462,047	20,000,000	13,854,615

VI.—MOTOR VEHICLES.

The earliest motor vehicles were propelled by steam, the history of the gasoline motor car commencing with the successful construction of a gasoline engine by Daimler in 1884. Until 1900 France remained the headquarters of the industry, possessing in that year more than half of the 10,000 cars in operation in Europe, while in the United States the number of cars was only about 700. Shortly afterwards, the invention of the Ford car resulted in a keen competition to bring motor cars within the reach of the average man, profits being secured from large production rather than high prices. Detroit became the centre of the automobile industry of the United States and the Canadian side of the Detroit river became the headquarters of the Canadian industry. As a consequence, the population of such border towns as Windsor, Walkerville and Sandwich has greatly increased in the past decade, while Ford City, which had no existence in 1911, had 5,870 inhabitants in 1921. Problems of regional location have resulted during more recent years in a gradual shifting of the centre of the industry, and the Toronto district now rivals in importance the older established centre on the Detroit river.

Like many other inventions, the motor car commenced as a toy, then as a luxury of the rich, while now it ranks as a comfort of those in moderate circumstances and may even become a necessity of life to the masses. Of late years it has been increasingly used for economic purposes; to-day the great majority of cars effect substantial economies in time or in money for their owners, partly or wholly offsetting their cost of upkeep. In the past few years, the motor truck—the freight automobile—has assumed considerable economic importance, and is now separately classified in Table 32 of this section. There seems to be but little doubt that in Canada, as was the case in England and the New England States, only the lack of adequate road systems is postponing a great increase in motor bus traffic for both passenger and fast freight service.

In a recent government report the statement is made that "the automotive transport industry is just beginning to be a factor in the transportation of passengers and freight in this country. Railways have found that the handling of less than car-load lots of freight is often unprofitable business; it follows that commercial trucks are being used in greater numbers to carry lighter shipments of property between some of the larger centres served by adequately surfaced highways." While the increased passenger and freight rates are probably the main cause of the comparatively slow increase in recent years in railway traffic (see Table 6 of this section), there can be no doubt that motor vehicles are now serving much of the short haul traffic formerly served by steam and electric railways. In addition, a certain amount of traffic formerly carried over water routes has been diverted to these more modern carriers.

The automobile manufacturing industry in Canada has made very rapid growth since its beginning about the year 1905, two of its chief tendencies during the period having been a consolidation of smaller firms into large units and the adoption of large-scale methods of production, similar in many ways to those of the American industry. A brief statement of its history, with statistics of production, etc., is to be found on pages 432 to 436 of this volume.

Registration.—The increase in the use of motor vehicles in Canada has been very rapid. In 1904 the number of motor vehicles registered in Ontario was only 535. In 1907, 2,130 motor vehicles were registered in six provinces, and in 1908, 3,033 in eight provinces, the motor car being at that time prohibited in Prince Edward Island. From these small beginnings Table 31 shows an increase to 586,764 motor vehicles in 1923, an increase over 1922 of 72,943, or more than the total number of motor vehicles registered in 1914. In Table 32 are given the numbers registered by provinces in 1923, classified as passenger cars, commercial cars or trucks and motor cycles.

By far the greatest increase during the past year has been in Ontario, where the number of cars registered in 1923 is shown as 280,996, in comparison with 240,933 in the previous year. The percentage increase in this province is thus 16.6, as compared with a figure of 14.4 for the whole of Canada, the actual number, 40,063, constituting the greater part of the total increase for the Dominion.

According to statistics collected for 1923 by the National Automobile Chamber of Commerce of the United States, Canada in that year ranked third among the countries of the world in the number of its registered motor vehicles. The total shown (642,571), which, however, is not closely in accord with provincial totals of registrations collected by the Dominion Bureau of Statistics, is 282 less than that of the United Kingdom, where total registration for 1923 is set at 642,853. Registrations in United States during the past year were 15,092,177; in France, the fourth largest user of motor vehicles, 444,812; in Germany, 152,068; in Australia, 118,091; in Argentina, 85,850; and in Italy, 75,000.

In 1923, there was, in Canada, one motor vehicle for every 15.6 of its population, or one for every 3.39 families. In respect to motor vehicles per population, when compared with the more important foreign countries, Canada ranks second to the United States, where, in 1923, there was a motor vehicle registered for every 7.3 of the population of the country. A comparison of the various provinces in the same respect shows, in 1923, one motor vehicle to every 35.8 persons in Prince Edward Island, to every 29.0 in Nova Scotia, 23.6 in New Brunswick, 33.7 in Quebec, 10.8 in Ontario, 15.2 in Manitoba, 12.1 in Saskatchewan, 14.1 in Alberta, 13.5 in British Columbia and 40.8 in the Yukon Territory.

Table 31 shows the registration of motor vehicles in Canada, by provinces, for the years 1907 to 1923.

31.—Number of Motor Vehicles registered in Canada, by Provinces, calendar years 1907-1923.

Years.	P. E. Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Mani- toba.	Saskat- chewan.	Alberta.	British Colum- bia.	Canada.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
1907.....	-	62	-	254	1,530	-	54	55	175	2,130
1908.....	-	65	104	296	1,754	412	74	65	263	3,033
1909.....	-	69	167	485	2,452	662	149	275	504	4,763
1910.....	-	148	299	786	4,230	1,524	531	423	1,026	8,967
1911.....	-	228	483	1,878	11,339	2,436	1,304	1,631	2,220	21,519
1912.....	-	456	700	3,535	16,266	4,099	2,286	2,505	4,289	34,136
1913.....	26	511	824	5,452	23,700	5,475	4,659	3,773	6,138	50,558
1914.....	31	1,324	1,328	7,413	31,724	7,359	8,020	4,728	7,628	69,598
1915.....	34	1,841	1,900	10,112	42,346	9,225	10,225	5,832	8,360	89,944
1916.....	50	3,012	2,965	15,335	54,375	12,765	15,900	9,516	9,457	123,464
1917.....	303	5,350	5,251	21,213	83,308	17,507	32,505	20,624	11,645	197,799
1918.....	639	8,100	6,434	26,897	114,376	24,012	50,531	29,300	15,370	275,746
1919.....	967	10,210	8,306	33,547	144,804	30,118	56,855	34,000	22,420	341,316
1920.....	1,419	12,450	11,196	41,562	177,561	36,455	60,325	38,015	28,000	407,064
1921.....	1,751	14,205	13,615	54,670	206,521	40,215	61,184	40,235	32,900	465,378
1922.....	2,167	16,159	13,746	61,995	240,933	42,200	61,367	40,642	34,526	513,821
1923.....	2,455	18,354	16,829	72,448	280,996	42,428	67,279	44,841	41,053	586,764

NOTE.—The number of motor vehicles in the Yukon (never more than 100) is included in the totals, for Canada, 1914-23.

In Table 32 the registration of motor vehicles in 1923 is given according to the general type or purpose of the cars in use in each of the provinces.

32.—Types of Motor Cars registered in Canada, by Provinces, for the calendar year 1923.

Provinces.	Passenger Cars.	Commercial Cars or Trucks.	Motor Cycles.	Dealers' Cars.	Total.
	No.	No.	No.	No.	No.
Prince Edward Island.....	2,331	100	7	17	2,455
Nova Scotia.....	16,084	2,019	129	122	18,354
New Brunswick.....	15,453	1,185	74	137	16,829
Quebec.....	60,363	9,235	1,701	1,128	72,448 ¹
Ontario.....	245,815	29,068	4,325	1,788	280,996
Manitoba.....	39,192	2,249	642	345	42,428
Saskatchewan.....	63,017	3,311	207	728	67,279 ²
Alberta.....	39,742	2,191	390	721	44,841 ³
British Columbia.....	33,144	6,842	868	199	41,053
Yukon.....	57	19	2	-	81 ⁴
Total.....	515,178	56,219	8,345	5,185	586,764⁵

¹ Includes 21 farm tractors registered. ² Includes 16 miscellaneous registrations.

³ Includes 1,797 farm tractors registered. ⁴ Includes 3 miscellaneous registrations.

⁵ Includes 19 miscellaneous and 1,818 farm tractors.

Government Revenue.—The taxation of motor vehicles, garages, chauffeurs, etc., is becoming a lucrative source of government income. In every province the operation of automobiles and motor cycles is dependent on their carrying a license duly issued by the various authorities, while similar licenses permit the maintenance of garages and the driving of cars or trucks by hired chauffeurs. The accompanying table (33) shows the government revenue by provinces for the calendar year 1923, indicating, at the same time, the more important sources from which it is derived.

33.—Revenues from the Taxation of the Sale, Distribution and Operation of Motor Vehicles, by Provinces, for the calendar year 1923.

Provinces.	Passenger Cars.	Trucks, etc.	Motor Cycles.	Dealers' Cars.	Gar-ages.	Operators and Chauffeurs.	Fines.	Miscellaneous.	Total.
	\$	\$	\$	\$	\$	\$	\$	\$	\$
Prince Edward Island.....	49,052	1,710	70	598	—	739	—	334	52,503
Nova Scotia.....	416,568	53,124	1,219	7,811	—	7,113	444	—	486,279
New Brunswick.....	366,309	1	1	3,749	—	2,715	424	3,769	376,966
Quebec.....	1,369,053	342,544	11,410	19,271	8,444	382,881	96,742	1,149	2,231,494
Ontario.....	3,596,097	590,895	16,933	40,030	17,023	31,526	—	—	4,292,504
Manitoba.....	678,015	45,878	3,522	7,223	—	23,561	—	39,156 ²	797,355
Saskatchewan.....	1,055,495	32,462	1,605	21,250	326	3,225	—	10,863	1,125,226
Alberta.....	722,123	1	1,780	7,413	—	4,830	6,300	255,501 ³	997,947
British Columbia.....	—	—	—	—	—	—	—	—	1,066,359
Yukon.....	627	242	8	—	—	—	—	—	877
Total	8,253,339	1,066,855	36,547	107,345	25,793	456,590	103,910	310,772	11,427,510

¹ Included with passenger cars. ² Gasolene tax.

³ Includes gasolene tax, \$241,248: farm tractors, \$13,695: miscellaneous, \$558.

⁴ Note omissions.

Motor Vehicle Acts and Regulations.

The following is a brief synopsis of the laws and regulations in force in each province.

Prince Edward Island.—Under the Motor Vehicles Act, 1922, and regulations, all cars must be registered in the office of the Provincial Secretary. In addition to a registration fee of five dollars, and a marker fee of one dollar, an annual tax of 80 cents per 100 pounds weight is payable on the 1st of May, but this is not required of non-residents unless the car is used in the province during more than eight weeks in one year. Chauffeurs must be 18 years of age, all other drivers of cars, owners included, must be 17 years old and must be licensed. Every car must have a lock or other device, to prevent it from being operated when left unattended. The speed limits are, in cities, towns and villages, 12 miles an hour, on approaches to steep descents, bridges, or highway crossings, 10 miles an hour, on roads outside cities or incorporated towns on which the driver has not a clear view for at least one hundred yards free from turns and intersections, 15 miles an hour, and in all other places, 25 miles an hour. The number of cars registered in 1923 (up to December 31), including dealers' registrations, was 2,455. All vehicles keep to the right of the road since May 1, 1924.

Nova Scotia.—The Motor Vehicle Act requires cars to be registered by the Provincial Secretary, who issues permits renewable annually on January 1. Cars belonging to persons residing out of Nova Scotia need not be registered if they are registered in the place where owners reside, and are operated for private use. This privilege is given for a period of not more than three months in each year. If owners come into the province to reside permanently or to carry on business they must register. No person under 16 years may operate a motor vehicle, and paid chauffeurs must be at least 18 and must take out licenses. Cars must have devices which will prevent their operation when left unattended and must also have mufflers. The speed limits are, in cities, towns and villages and in places where there is no clear view of the road for at least 50 yards, 15 miles an hour, at crossroads and bridges, 15 miles, and in other places 25 miles an hour. During 1923 the total number of permits issued for cars was 18,354, including 129 motor cycles.

New Brunswick.—Under the Motor Vehicle Law, 1915, as amended May, 1917, the registering and licensing authority is the Department of Public Works. Cars must be registered when new and besides the registration fee, an annual fee is payable on January 1. Non-residents may not operate cars registered in another province or state during more than 30 days in any year without registration in New Brunswick. The driver of a car must be 18 years old, and must be the owner or a member of his household, a licensed chauffeur or a person accompanied by a chauffeur; all chauffeurs must take out licenses and must pass a qualifying examination before issue of the license. The speed limits are, in cities, towns and villages, 12 miles an hour, in places which are closely built up, 15 miles an hour and in other places where the road cannot be seen clearly for 200 yards, 20 miles an hour. All vehicles keep to the right since Nov. 30, 1922.

Quebec.—The law regarding motor vehicles is contained in the Quebec statutes of 1923-24, 14 Geo. V, c. 10. Cars must be registered in the office of the Provincial Treasurer and re-registered annually on March 1. Certain government and municipal cars and farm tractors are given free registration, while exemptions are made in the case of pleasure cars registered in other provinces and certain commercial vehicles, but only in cases specified in article 10 of the Act. All drivers of cars must be licensed, and must not be less than 18 years old. Cars, when left unattended, must be locked in such a way as to prevent their use, and all cars must have mufflers. The speed limits are, in cities, towns and villages, 20 miles an hour, on highways where the land is closely built up, 20 miles an hour, at bridges and cross-roads and within a distance of five hundred feet before reaching a railroad crossing, 8 miles an hour and in open country 30 miles an hour. Motors must stop for street cars which are standing to take on or discharge passengers and must reduce the speed to 16 miles an hour when meeting another vehicle. These rates have reference to pleasure cars only. In the case of a commercial vehicle having non-pneumatic tires, a speed of 8 miles an hour when loaded and 10 miles an hour when unloaded is allowed. When equipped with pneumatic tires the corresponding rates are 12 and 15 miles an hour.

Ontario.—The Act concerning motor vehicles is the Highway Traffic Act, 1923. This Act came into effect on the 1st of January, 1924, and is a consolidation of the Motor Vehicles Act, the Highway Travel Act, the Load of Vehicles Act and the Traction Engines Act. The registering authority is the Department of Public Highways, Motor Vehicles Branch, which issues permits that remain in force for the calendar year. Cars may be used without registration for not more than three months in one year if registered in some other province, and for 30 days in one year if registered in certain states of the Union which have entered into agreement with the Province of Ontario. No person under 16 may drive a car, and those between the ages of 16 and 18, as well as all paid chauffeurs, must be licensed. Cars must be equipped with mufflers. The speed limit in cities, towns and villages is 20 miles an hour, in other places 25 miles an hour and at road intersections, where vision is obscured, one-half of these rates of speed. A motor may not pass a street car which has stopped for passengers to get on or off. At street intersections a vehicle approaching from the right has the right-of-way. All cars are required to be equipped with non-glaring headlights.

Manitoba.—Under the Motor Vehicle Act, cars must be registered in the office of the Municipal Commissioner, and the registration is renewable annually on January 1. Chauffeurs must not be under 18 years old, and must have licenses; other drivers must not be under 16 years of age. Cars must have mufflers and

devices to prevent their use when left unattended. Motors must stop when behind standing street cars. The provisions of the Act relative to registration and display of registration numbers do not apply to a motor vehicle owned by a non-resident of the province, other than a foreign person, firm or corporation doing business in the province, provided that the owner thereof shall have complied with the provisions of the law of the province, foreign country, state or territory of his residence relative to registration of motor vehicles and the display of registration numbers thereon, and shall conspicuously display his registration numbers as required thereby. These provisions, however, shall be operative as to a motor vehicle owned by a non-resident of Manitoba only to the extent that, under the laws of the province, foreign country, state or territory of his residence, like exemptions and privileges are granted to motor vehicles duly registered under the laws of and owned by residents of Manitoba. No person shall operate a vehicle at a rate which is unreasonable, having regard to the traffic on the highway, and in case of prosecution for such an offence, the onus of proving his innocence shall be upon the person accused.

Saskatchewan.—The licensing authority under the Vehicle Act is the Provincial Secretary. Licenses expire annually on December 31. Motor license fees are based on the "wheel base," and increase from a minimum of \$15.00. The fee for a livery license is \$8.00 more than the fee for a private license for the same car. Every applicant for a chauffeur's license must first satisfy the Provincial Secretary that he is a fit and proper person, capable of operating a motor vehicle, and all applicants resident in a city or town are required to obtain endorsement of their application by the chief constable, the secretary-treasurer being responsible in the smaller urban and rural municipalities. No person under the age of sixteen may drive a car, and a chauffeur's license may be granted to applicants under eighteen only upon passing a special examination test. Every motor vehicle except motor cycles must expose two number plates, one on the front and one on the rear. Motor vehicles must carry lights at night and the front lights must be dimmed to prevent glare. Cars must be equipped with mufflers. Non-residents may use cars for thirty days under permit from the Provincial Secretary without registration in the province. Cities, towns and villages have authority to regulate the speed limit within their respective boundaries. There is no speed limit in rural districts, but special precautions are prescribed against accidents. Motor vehicles must stop for street cars which are taking on or discharging passengers. Upon meeting another vehicle at an intersection of highways, the vehicle to the right hand has the right-of-way. Should a driver desire to turn on leaving a stopping place, he may do so only at an intersection of the public highway.

Alberta.—The law relating to motor vehicles is contained in the Motor Vehicle Act, 1911, and amending Acts, and the Highways Act, 1911. Cars must be registered, with descriptions, in the office of the Provincial Secretary, who issues certificates which are renewable annually on January 1. Paid chauffeurs must be licensees, and all drivers must be over 16 years old, if male, or 18 years if female. Cars must be equipped with mufflers. The speed limits are 20 miles an hour in cities, towns and villages, and 10 miles an hour at street crossings and bridges, while there is special provision for speed of fire vehicles going to fires. A motor car may not pass a street car which has stopped for passengers to get on or off. Regulations may be made by the Lieutenant-Governor in Council providing for permits to a resident of the United States or of any province in Canada, who has complied with the provisions of the law regarding registration of his motor vehicle in the state or province in which he resides, to operate an unregistered car in Alberta.

Such exemption or privilege applies to such persons only to the extent to which, under the laws of the said state or province, similar exemptions or privileges are granted with respect to motor vehicles registered under the laws of and owned by residents of Alberta. The same applies to drivers' licenses. The Provincial Secretary may revoke or suspend the license of any chauffeur convicted under the provisions of the Liquor Act of selling or having for sale intoxicating liquor. Provision is made for the impounding of cars by the authorities where the owners or drivers are convicted of driving cars while intoxicated or convicted under other sections of the Act relating to speeding and juvenile driving. There is provision against the carrying of loaded weapons in an automobile—a preventive measure against accidents during hunting trips.

British Columbia.—Under the Motor Vehicle Act and amending Acts, cars are required to be registered with the Superintendent of Provincial Police. Licenses expire on December 31. Foreign registered cars may be used for touring in the province under a touring license issued by the Superintendent of Provincial Police. Cars registered outside the province may be used for 6 months free. No person under the age of 17 may drive a car, and paid chauffeurs must take out licenses. The speed limits are, in cities, towns and villages, 15 miles an hour, in wooded country, 15 miles and in open country 30 miles an hour. A motor may not pass a standing street car at more than 5 miles an hour and must stop if it overtakes the car while taking on or discharging passengers, and must not exceed a speed of 10 miles an hour when passing school houses between the hours of 8 a.m. and 5 p.m.

Yukon Territory.—The Motor Vehicle Ordinance, No. 14, 1914, requires all cars to be registered in the office of the Territorial Secretary, who issues certificates renewable annually on July 15. A non-resident may operate an unregistered motor for not more than 90 days. No male under 16, and no female under 18 years of age may drive a motor. In cities, towns and villages the speed limit is 15 miles an hour, or 10 miles an hour at street intersections.

VII.—AIR NAVIGATION.

It was only in 1909 that Blériot made the first flight across the English channel, his venture marking the successful culmination of many previous years of experiment with aircraft. In the five years that intervened before the war, progress was slow, increasing greatly, however, with the exigencies of the belligerents in the European conflict. Post-war years are witnessing, in Canada, serious and successful attempts to adapt the experience of war years to commercial purposes.

A result of the impetus given to air navigation by military operations has been, in Canada as in other countries, that the control of its development has rested largely in the hands of military authorities, and at the present time all aerial traffic, if not directly under the supervision of the Department of National Defence, is at least carried on with its sanction. This latter takes the form of licenses and permits granted to duly tested machines and qualified personnel.

Aviation in Canada is divided into two main branches, (1) Civil Aviation, (2) Military Aviation.

Civil Aviation.—There is in Canada no appropriation in aid of civil aviation and it was soon proved that passenger services and exhibition flying alone were not sufficient to make a success of commercial aviation. The result has been a slow but steady growth of really useful flying. Aviation in aid of forest conservation is still young, but each year's experience brings further improvements in methods

and results, and now it is fully realized that aviation is both more economical and more efficient in patrolling for forest fires and in mapping and surveying unexplored timber lands than any other method.

All aircraft, pilots, air engineers and air harbours operate under license from and under the supervision of the Department of National Defence, which is responsible for the application of Air Regulations, 1920.

During 1923 civil aviation was carried on by the Laurentide Air Service, Fairchild Aerial Surveys Co., Dominion Aerial Exploration Co. and several smaller firms and individuals including the Laurentian Air Services of St. Jovite, P.Q.; Commercial Aviation School of Victoria, B.C.; J. V. Elliot of Hamilton, Ont.; R. J. Groome of Moose Jaw, Sask.; and O. H. Clearwater of Saskatoon, Sask.

Military Aviation.—Military aviation is divided into two parts, (1) civil operations for other Departments of the Dominion Government and for Provincial Governments and (2) Air Force training, both carried out by the Royal Canadian Air Force. Civil operations include forest fire patrols and sketch mapping, aerial surveys, fishery protection and transportation in the remoter parts of the country. For this work there are operational stations at Vancouver, B.C., High River, Alta., Victoria Beach, Man. and Dartmouth, N.S. Air Force training is carried out at Camp Borden and experimental work at Ottawa.

Brief tables compiled from the reports of the Air Board for the years 1922 and 1923 are appended. While these statistics are not given under provincial classifications, it may suffice to state that the greatest amount of flying is done in Ontario, Quebec and British Columbia, these three provinces providing the most extensive fields for forest survey and fire patrol work. A smaller amount has been done in Saskatchewan. No flights were recorded during the year 1923 in Alberta, Manitoba, Prince Edward Island, Nova Scotia or New Brunswick. Expenditure by the Dominion Government on military aviation for the fiscal year 1923-24 was set by the estimates at \$1,250,000. This includes amounts apportioned to the two branches set out above.

34.—Summary Statistics of Commercial Aviation in Canada, calendar years 1921-1923.

Items.	1921.	1922.	1923.
Firms selling aircraft.....	1	1	2
Firms operating aircraft.....	29	23	15
Licensed airplanes.....	58	46	45
Licensed seaplanes.....	15	13	23
Total licensed aircraft.....	73	60 ¹	69
Machine flights.....	10,386	4,415	3,086
Total machine mileage.....	294,449	185,211	188,098
Number of passengers carried.....	9,153	4,282	2,238
Total number of persons carried.....	19,539	8,697	5,324
Freight or express carried (lbs.).....	79,850	14,681	17,600
Mail carried (lbs.).....	—	62,025	—
Total licensed air harbours.....	35	30	31
Total licensed personnel.....	223	164	296
Unlicensed mechanics employed.....	26	20	18

¹ Includes one amphibian type in commercial use.

The figures shown in the table above indicate decreases in the number of machine flights, passengers carried and other aspects of the general use of aircraft in the Dominion. While decreases are undoubtedly to be recognized, at the same time the point may be made that the amount of useful work carried on by means of

aviation has substantially increased. In illustration of this fact, attention may be drawn to the decrease in the number of machine flights, accompanied by the increase in mileage flown and a longer average flight duration.

A table of civil aviation accidents in 1921, 1922 and 1923 follows.

35.—Commercial Aviation Accidents in Canada for the calendar years 1921-1923.

Items.	1921.	1922.	1923.
Accidents—			
Resulting in death to occupants.....	3	—	2
Resulting in injury.....	2	3	3
Not involving injury.....	10	4	4
Total accidents.....	15	7	9
Fatalities—			
Pilots killed.....	1	—	2
Crew killed.....	—	—	—
Passengers killed.....	3	1	3
Total personnel killed.....	4	1	5
Injuries—			
Pilots injured.....	3	3	2
Crew injured.....	—	—	—
Passengers injured.....	3	6	1
Total personnel injured.....	6	9	3

VIII.—CANALS.

Historical.—Before the period of extensive railway construction which commenced for Canada in the 1850's, the water routes, more especially the St. Lawrence, the Great Lakes and the Ottawa, were the chief avenues of transportation. These routes were interrupted at certain points, necessitating portages. The canals of Canada were, in the main, constructed to eliminate the toil of unloading, transporting and reloading at the portages.

The earliest mention of canals in Canada is in connection with the Lachine canal, begun by early French settlers in 1700, but only after the conquest of Canada by the British were improvements of the main water routes made, and in the early part of the 19th century, increased internal and foreign trade and the introduction of steam navigation resulted in more attention being given to this work. Although for a time the canals were constructed primarily for military purposes, they soon became essential to the commercial life of the country.

Canal Systems.—There are six canal systems under the control of the Dominion Government in connection with navigable lakes and rivers. They consist of the canals (1) between Port Arthur or Fort William and Montreal; (2) from Montreal to the international boundary near lake Champlain; (3) from Montreal to Ottawa; (4) from Ottawa to Kingston and Perth; (5) from Trenton, lake Ontario, to lake Huron (not completed); and (6) from the Atlantic ocean to Bras d'Or lakes, Cape Breton. The total length of the waterways comprised within these systems is about 1,594 statute miles, the actual mileage of canals constructed being 117.2.

St. Lawrence Canals.

The St. Lawrence River group, part of the Montreal to Port Arthur system, comprises six separate canals at different points between Montreal and Prescott, not including the so-called "submerged canal" or channel dredged through shallow parts of the river between Montreal and Quebec.

Lachine Canal.—The first attempts at surmounting the Lachine rapids by means of a canal were made by Sulpician monks in the early years of the 18th century. The present canal, lying along the same route, was constructed between the years 1818 and 1825 and opened for traffic in 1824. It had seven locks and accommodated vessels of $4\frac{1}{2}$ feet draft. In 1843 an enlargement was commenced which, completed in 1848, provided locks with 9 feet of water. In 1885 the present canal with five locks, 270 feet by 45 feet and having 14 feet of water on lock sills, was opened for traffic.

Soulanges Canal.—This canal, which overcomes the Cascades, Cedar and Coteau rapids, occurs next in order on the St. Lawrence route. It is the longest and deepest of the St. Lawrence River canals, being 14 miles from end to end and having five locks, 280 feet by 45 feet, with 15 feet of water on the sills. Under the French *régime* four small canals with a depth of only $2\frac{1}{2}$ feet were constructed and later enlarged by the British authorities in 1845, when the depth was increased to 9 feet. The present canal was opened to traffic in 1899.

Cornwall Canal.—The Cornwall canal provides a waterway around the Long Sault Rapids. It is $11\frac{1}{4}$ miles long and has six locks, 270 feet by 45 feet, with 14 feet of water over lock sills. This canal was first constructed between 1834 and 1843, with a depth of only 9 feet, and was enlarged to the present dimensions in 1901.

Williamsburg Canals.—After a navigable stretch of 5 miles, a series of three canals, the Farran's Point, Rapide Plat and Galops are entered. These are known as the Williamsburg canals and extend, including river reaches between, for a distance of $26\frac{1}{4}$ miles, whence river and lake navigation are possible without interruption until the Welland canal is entered 228 miles farther west. The three canals of this system were all first constructed between the years 1843 and 1847, with a minimum depth of 9 feet. They were enlarged between the years 1897 and 1901, with locks 270 feet by 45 feet and a depth of 14 feet on lock sills.

Welland Canal.—This important waterway, which overcomes the fall of 325 feet of the Niagara river, connects lake Ontario with lake Erie. The original canal, opened in 1829, extended from Port Dalhousie on lake Ontario to the town of Port Robinson, where a connection was made with the Welland river. The course was down this river to its junction with the Niagara river and thence to lake Erie. This was not found satisfactory and between the years 1831 and 1833 the canal was extended along a route from Port Robinson to Port Colborne. The present canal, $26\frac{3}{4}$ miles in length and with locks of the same dimensions as those of the St. Lawrence canals, was completed in 1887. Construction of the Welland ship canal was commenced in 1913 and when completed this canal will have a length of only 25 miles with seven lift locks having dimensions of 800 feet by 80 feet, with 30 feet of water over sills. Entrance to the canal will be made at Port Weller, about 3 miles east of Port Dalhousie, and between this point and Allanburg an entirely new route will be followed, but the line of the present canal will be adhered to between Allanburg and Port Colborne.

Sault Ste. Marie Canal.—The Canadian lock at Sault Ste. Marie was constructed to overcome the difference in level of 19 feet between lakes Huron and Superior. The earliest canal at this point was built in 1797-98 by the Northwest Fur Company. It consisted of one lock, 38 feet long, and had 9 feet of water on the sills. This lock was destroyed in 1814 by United States troops and was not reconstructed until 1853-55, when one lock was built on the United States side of the river. This has since been superseded by four more modern locks, constructed at intervals between

the years 1881 and 1919. The Canadian canal was completed in 1895 and consists of a single lock, 900 feet by 60 feet, with a minimum depth of water on sills of 18 feet, 3 inches.

Chambly Canal.

The inland water route between Montreal and New York is down the St. Lawrence river, up the Richelieu river through lake Champlain and the Champlain canal and down the Hudson river. Rapids on the Richelieu river at St. Ours are passed by a lock, 200 feet by 45 feet with 7 feet of water on the sills, constructed in 1844-49, while a canal, with 9 locks, the smallest of which is 118 feet by 22½ feet, with 6½ feet of water on the sills, joins Chambly and St. Johns. Construction of this canal was commenced in 1831 and completed in 1858.

[Ottawa Canals.

The navigation of the Ottawa river between the port of Montreal and the city of Ottawa is effected by means of the Lachine canal, the Ste. Anne lock and the Carillon and Grenville canals. The Ste. Anne lock surmounts the Ste. Anne rapids at the junction of the Ottawa river with lake St. Louis. Between the years 1840 and 1843, the first lock was constructed, its dimensions being 190 feet by 45 feet, with 6 feet of water, and an additional lock, 10 feet longer and 3 feet deeper, was constructed between the years 1880 and 1883. Both locks are now in operation. Between Carillon and Grenville there were originally three canals, constructed by the Imperial Government between the years 1825 and 1833. The second of the three, the Chute à Blondeau, was abandoned after the completion of the Carillon dam in 1881. At this time also, the Carillon and Grenville canals were reconstructed, the work being fully completed in 1884. The locks on these canals are of the same dimensions as the newer of the two locks at Ste. Anne.

Rideau Canal.

This canal, constructed by the British Government between the years 1826 and 1832 and providing a continuous waterway between the cities of Ottawa and Kingston, owed its inception to purely military considerations incident to the war of 1812. It consists of a series of natural water courses connected by short cuttings and locks starting with the Rideau river at Ottawa, rising to a summit at the Upper Rideau lake and finally entering lake Ontario by the Cataraqui river. This canal, with a total length of 126¼ miles, was transferred to the Provincial Government in 1857 and after Confederation was taken over by the Dominion authorities. It has forty-seven locks, 134 feet by 33 feet, with 5 feet of water on sills. From the northerly end of the Lower Rideau lake, a branch, 7 miles in length, extends to the town of Perth.

Trent Canal.

In the Trent canal is comprised a system of navigation which extends from Trenton on the bay of Quinte to Georgian bay on lake Huron. The route of this canal follows the river Trent to Rice lake, thence by the Otonabee river to Peterborough from which point, by a series of rivers, lakes and artificial channels it reaches lake Simcoe, passing next into lake Couchiching and Sparrow lake, whence it follows the line of the Severn river to Honey harbour on Georgian bay. Up to the present the canal has been opened to navigation as far west as Sparrow lake and, by the use of marine railways at Swift rapids and Big Chute, motor vessels of five tons may complete the passage to Georgian bay *via* Port Severn. While the canal is of no

economic importance as a waterway, its power facilities are of considerable value. It is also noted for the hydraulic lift-lock at Peterborough, capable of lifting an 800-ton vessel a vertical distance of 65 feet.

Murray Canal.—An open waterway across the isthmus of the Prince Edward County peninsula may in a sense be considered as forming part of the Trent Canal system. Vessels leaving the Trent canal at Trenton can by this route pass directly into lake Ontario. The first proposal to construct this canal appears to have been made in 1796, and the project was discussed frequently thereafter in the Provincial Legislature. Construction, however, was not begun until 1882 and was completed in 1889.

St. Peters Canal.

This, the most easterly of the Canadian canals, crosses an isthmus half a mile in width on the southerly side of Cape Breton Island, N.S., and connects St. Peters bay with the Bras d'Or lakes, from the northerly end of which access is had to the Atlantic ocean. It consists of one tidal lock, 300 feet by 48 feet, with a depth of 18 feet on sills, first constructed in 1869 but extensively repaired and improved between the years 1912 and 1917.

St. Andrews Lock.

St. Andrews Lock, with dimensions of 215 feet by 45 feet, with 17 feet of water, overcomes rapids on the Red river, 15 miles north of Winnipeg, and was opened to traffic in 1910.

36.—Canals of Canada, Length and Lock Dimensions, 1923.

Name.	Location.	Length in Miles.	Locks.			
			No.	Minimum dimensions.		
				Length.	Width.	Depth.
				Ft.	Ft.	Ft.
St. Lawrence—						
Lachine.....	Montreal to Lachine.....	8.50	5	270	45	14
Soulages.....	Cascades Point to Coteau Landing..	14.00	5	280	45	15
Cornwall.....	Cornwall to Dickinson's Landing....	11.00	6	270	45	14
Farran's Point.....	Farran's Point rapid.....	1.25	1	800	50	14
Rapide Plat.....	Rapide Plat to Morrisburg.....	3.67	2	270	45	14
Galops.....	Iroquois to Cardinal.....	7.33	3	270	45	14
Welland.....	Port Dalhousie, lake Ontario, to Port Colborne, lake Erie.....	26.75	26	270	44	14
Sault Ste. Marie.....	St. Mary's rapids, 47 miles west of lake Huron.....	1.41	1	900	60	19.5
Richelieu river—						
St. Ours Lock.....	St. Ours, Que.....	0.12	1	200	45	7
Chambly.....	Chambly to St. Johns, Que.....	12.00	9	118	22.5	6.5
Ottawa and Rideau rivers—						
Ste. Anne Lock.....	Junction of St. Lawrence and Ottawa rivers.....	0.12	1	200	45	9
Carillon.....	Carillon rapids, Ottawa river.....	0.75	2	200	45	9
Grenville.....	Long Sault rapids, Ottawa river.....	5.75	5	200	45	9
Rideau.....	Ottawa to Kingston.....	126.25	47	134	33	5
	Rideau lake to Perth (Tay branch).	7.00	2	134	33	5
Miscellaneous—						
Trent.....	Trenton to Peterborough lock, Peterborough.....	89.0	18	175	33	8.3
	Peterborough lock to head of lake Couchiching.....	114.6	23	134	33	6
	Sturgeon lake to Port Perry (Seugog branch).....	30.0	1	142	33	6
Murray.....	Bay of Quinte to lake Ontario.....	0.17	0	—	—	12
St. Peters.....	St. Peter's bay to Bras d'Or lakes, Cape Breton, N.S.....	0.49	1	300	48	18
St. Andrews.....	Red river, 15 miles north of Winnipeg	—	1	215	45	17

Projected Canals.—Of the proposed canal schemes, the Georgian Bay route and the deepening of the St. Lawrence waterways are the most prominent. The former, first travelled by Champlain in 1615, from Montreal along the Ottawa and French rivers to Georgian bay, has been strongly advocated on numerous occasions. Its great cost, however, and the loss of time in locking, present serious drawbacks to the undertaking. The construction of the proposed deep waterway along the St. Lawrence from lake Ontario to the sea, for purposes of navigation and power development, has been deferred for the present, after consideration by the Governments of Canada and the United States.

Canal Traffic.

Tables 37 to 43 illustrate the nature of traffic passing through Canadian canals in 1923. It will be noticed that an increase of 1,173,379 is shown over the total tonnage carried in the season of 1922. Much of this is due to the heavy grain trade from ports on the Upper Lakes. Its influence is clearly shown by the marked excess of down traffic over that moving inland. The duration of the season of navigation and the comparative density of traffic during the months from May to October, together with the progressive yearly tendency for traffic to be heavier in the fall months than in the earlier summer months, are shown in Table 38. The various classes of traffic and the exact articles comprising them are shown in Tables 39 and 40 for the years 1922 and 1923. The preponderance of farm and mine products is an obvious one, showing substantial increases when compared with the previous year. Increases in volume of individual articles transported over the canals are most marked in the case of barley, oats, rye, wheat, pulpwood and hard and soft coal.

Table 41, giving traffic details of the canal at Sault Ste. Marie (long the most important canal in Canada), shows a break in the continued decrease in numbers of vessels and freight carried. The principal reason for its comparative disuse was to be found in the recent improvements effected in the American Sault canal, which, with the Canadian, is available for vessels of either country. In the following table the increase over 1922 in the total traffic of all canals is indicated by nationality of vessels. The figures for 1923 show a total of but 21.5 p.c. of that of 1913, the record year. A more detailed analysis by individual canals is given in Table 43.

37.—Canal Traffic during the Navigation Seasons of 1922 and 1923, by direction and origin.

Canals.	FROM CANADIAN TO CANADIAN PORTS.		FROM CANADIAN TO UNITED STATES PORTS.		FROM UNITED STATES TO UNITED STATES PORTS.		FROM UNITED STATES TO CANA- DIAN PORTS.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1922.								
Sault Ste. Marie...	258,974	925,865	5,558	86,735	45,473	306,492	57,510	22,453
Weiland.....	252,328	1,955,760	62,993	—	12,947	33,779	1,000	1,072,612
St. Lawrence.....	747,757	2,082,814	237,008	39,157	3,600	—	4,294	1,205,289
Chambly.....	3,103	6,281	134,829	—	—	—	—	38,830
St. Peters.....	12,551	40,186	—	—	—	—	—	—
Murray.....	1,330	—	513	—	—	—	—	—
Ottawa.....	26,592	143,764	—	38,584	—	—	4,287	—
Rideau.....	64,662	21,455	—	265	—	—	—	—
Trent.....	18,033	25,005	—	—	—	—	—	—
St. Andrews.....	25,104	283	—	—	—	—	—	—
Total.....	1,410,434	5,201,413	440,901	164,741	62,020	340,271	67,091	2,339,184

37.—Canal Traffic during the Navigation Seasons of 1922 and 1923, by direction and origin—concluded.

Canals.	FROM CANADIAN TO CANADIAN PORTS.		FROM CANADIAN TO UNITED STATES PORTS.		FROM UNITED STATES TO UNITED STATES PORTS.		FROM UNITED STATES TO CANADIAN PORTS.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1923.								
Sault Ste. Marie.....	270,865	1,323,116	2	167,661	83,068	171,182	157,457	73,578
Welland.....	276,731	2,405,137	7,165	—	51,422	60,301	3,333	951,823
St. Lawrence ¹	623,932	2,468,444	201,008	35,149	9,899	—	10,543	1,192,553
Chambly.....	25,825	5,251	99,854	—	—	—	—	82,260
St. Peters.....	11,611	33,063	—	1,900	—	—	—	—
Murray.....	—	665	1,864	1	—	—	614	—
Ottawa.....	20,868	172,468	—	35,112	—	—	4,644	—
Rideau.....	55,361	25,274	—	289	—	—	—	375
Trent.....	11,778	19,624	—	—	—	—	—	—
St. Andrews.....	36,736	628	—	—	—	—	—	—
Total.....	1,342,707	6,453,670	309,893	240,112	144,389	231,483	176,591	2,300,589

Canals.	TOTAL TRAFFIC BY DIRECTION.		ORIGIN OF CARGO.		Total Cargo.	Increase(+) or decrease (—) on previous year.
	Up.	Down.	Canada.	United States.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1922.						
Sault Ste. Marie.....	367,515	1,341,545	1,258,860	450,200	1,709,060	— 288,532
Welland.....	329,268	3,062,151	1,802,605	1,588,714	3,391,419	+ 314,907
St. Lawrence ¹	992,659	3,327,260	2,649,585	1,670,334	4,319,919	+ 585,854
Chambly.....	137,932	45,111	143,943	39,100	183,043	+ 2,763
St. Peters.....	12,551	40,186	52,737	—	52,737	— 3,386
Murray.....	1,843	—	1,843	—	1,843	— 43,437
Ottawa.....	30,879	182,348	208,940	4,287	213,227	+ 41,453
Rideau.....	64,662	21,720	86,369	13	86,382	— 8,630
Trent.....	13,033	25,005	42,958	80	43,038	— 1,209
St. Andrews.....	25,104	283	25,387	—	25,387	+ 19,156
Total.....	1,980,446	8,045,609	6,273,227	3,762,828	10,026,055	+ 619,034
1923.						
Sault Ste. Marie.....	520,392	1,735,537	1,775,872	480,057	2,255,929	+ 546,869
Welland.....	338,651	3,417,261	2,332,309	1,423,603	3,755,912	+ 364,493
St. Lawrence ¹	845,382	3,696,146	2,970,200	1,571,328	4,541,528	+ 221,609
Chambly.....	125,679	87,511	130,930	82,260	213,190	+ 30,147
St. Peters.....	11,611	34,963	46,574	—	46,574	— 6,163
Murray.....	2,478	666	2,530	614	3,144	+ 1,301
Ottawa.....	25,512	207,580	228,448	4,644	233,092	+ 19,865
Rideau.....	55,361	25,938	79,731	1,508	81,299	— 5,083
Trent.....	11,778	19,624	31,372	30	31,402	— 11,636
St. Andrews.....	36,736	628	37,364	—	37,364	+ 11,977
Total.....	1,973,580	9,226,854	7,637,485	3,561,949	11,199,434	+1,173,379

¹ Includes only the canals on the St. Lawrence river between Lachine and lake Ontario.

38.—Distribution of Total Canal Traffic, by months, calendar years 1918-1923.

Months.	1918.	1919.	1920.	1921.	1922.	1923.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
January.....	—	759	60	422	80	135
April.....	88,446	404,928	53,834	248,026	236,246	9,320
May.....	3,351,440	2,278,145	1,263,740	1,233,905	1,224,196	1,283,414
June.....	2,749,323	1,530,317	1,234,352	1,376,156	1,252,478	1,631,825
July.....	2,580,177	1,483,124	1,272,797	1,456,306	1,517,609	1,752,463
August.....	2,332,796	1,224,110	1,458,549	1,331,327	1,427,189	1,770,826
September.....	2,687,581	1,162,970	1,258,744	1,293,724	1,507,219	1,589,332
October.....	2,940,663	1,100,455	1,217,795	1,425,691	1,464,493	1,574,497
November.....	1,933,627	702,457	856,417	910,420	1,207,161	1,393,577
December.....	219,566	108,001	119,095	131,044	189,384	194,045
Total.....	18,883,619	9,995,266	8,735,383	9,407,021	10,026,055	11,199,434

39.—Tonnage of Traffic by Canals and Classes of Products, calendar years 1922-1923.

Canals.	Farm Products.	Manu- factures.	Forest Products.	Mine Products.	Total.
1922.	Tons.	Tons.	Tons.	Tons.	Tons.
Sault Ste. Marie.....	1,173,530	316,697	7,352	209,481	1,709,060
Welland.....	2,572,094	280,476	156,663	382,186	3,391,419
St. Lawrence.....	2,579,881	373,193	432,394	934,451	4,319,919
Chambly.....	5,799	23,184	129,775	24,285	183,043
St. Peters.....	9,499	6,260	732	36,246	52,737
Murray.....	60	513	—	1,270	1,843
Ottawa.....	5,498	29,599	88,871	89,259	213,227
Rideau.....	2,532	19,399	6,225	58,226	86,382
Trent.....	1,302	2,227	35,580	3,929	43,038
St. Andrews.....	45	201	4,621	20,520	25,387
Total.....	6,350,240	1,051,749	864,213	1,759,853	10,026,055
1923.					
Sault Ste. Marie.....	1,621,520	346,300	70,247	217,862	2,255,929
Welland.....	2,561,575	253,997	170,211	770,129	3,755,912
St. Lawrence.....	2,517,613	370,292	493,384	1,160,239	4,541,528
Chambly.....	7,696	13,840	120,305	71,349	213,190
St. Peters.....	9,305	5,933	2,041	29,295	46,574
Murray.....	490	2,040	—	614	3,144
Ottawa.....	5,766	30,052	93,431	103,843	233,092
Rideau.....	2,689	19,270	6,467	52,873	81,299
Trent.....	216	1,347	28,662	1,177	31,402
St. Andrews.....	296	263	6,176	30,629	37,364
Total.....	6,727,166	1,043,334	990,924	2,438,010	11,199,434

40.—Principal Articles carried through Canadian Canals during the Navigation Seasons of 1922 and 1923.

Articles.	1922.	1923.	Increase.	Decrease.
	Tons.	Tons.	Tons.	Tons.
Barley.....	262,024	458,088	196,064	—
Buckwheat.....	42	34	—	8
Corn.....	860,604	140,380	—	720,224
Oats.....	415,823	577,734	161,911	—
Rye.....	301,262	377,277	76,015	—
Flaxseed.....	52,394	40,486	—	11,908
Peas.....	55	76	21	—
Wheat.....	3,891,381	4,514,250	622,869	—
Flour.....	506,032	541,160	35,128	—
Hay.....	8,702	14,639	5,937	—
Other milled products.....	31,681	42,356	10,675	—
Fruits and vegetables.....	3,013	2,515	—	498
Potatoes.....	5,010	5,635	625	—
Live stock.....	964	669	—	295
Poultry, game and fish.....	2,541	2,161	—	380
Dressed meats.....	34	6	—	28
Other packing-house products.....	1,496	1,374	—	122
Hides and leather.....	42	33	—	9
Wool.....	599	196	—	403
All other animal products.....	6,541	8,097	1,556	—
Agricultural implements.....	9,726	18,170	8,444	—
Cement, bricks and lime.....	27,291	7,132	—	20,159
Household goods and furniture.....	3,388	2,848	—	540
Iron, pig and bloom.....	22,114	25,180	3,066	—
Iron and steel, all other.....	165,365	169,837	4,472	—
Petroleum and other oils.....	166,177	142,286	—	23,891
Sugar.....	122,119	96,847	—	25,272
Salt.....	13,198	13,976	778	—
Wines, liquors and beer.....	5,741	5,778	37	—
Merchandise not enumerated.....	516,630	561,280	44,650	—
Pulpwood.....	511,549	636,604	125,055	—
Sawed lumber.....	317,335	321,740	4,405	—
Squared timber.....	3,360	5,191	1,831	—
Shingles.....	821	771	—	50
Other woods.....	31,148	26,618	—	4,530
Hard coal.....	199,010	387,437	188,427	—
Soft coal.....	986,298	1,429,899	443,601	—
Coke.....	2,132	5,358	3,226	—
Copper ore.....	34,233	29,469	—	4,764
Iron ore.....	91,245	9,837	—	81,408
Other ore.....	808	726	—	82
Sand, etc.....	446,127	575,284	129,157	—
Total.....	10,026,055	11,199,434	1,173,379	—

41.—Traffic through the Canadian Sault Ste. Marie Canal during the Navigation Seasons, 1900-23, by Nationality of Vessel and Origin of Freight.

Years.	Canadian.		United States.		Total No.	Total Vessel Tonnage.	Tonnage of Freight:		
	No.	Vessel Tonnage.	No.	Vessel Tonnage.			Canadian.	United States.	Total.
1900....	1,790	577,310	1,291	1,617,438	3,081	2,194,748	255,264	1,780,413	2,035,677
1901....	2,796	775,151	1,408	1,674,597	4,204	2,449,748	494,613	2,325,781	2,820,394
1902....	3,080	1,366,930	1,964	3,237,372	5,044	4,604,302	1,140,623	3,588,645	4,729,268
1903....	2,711	1,615,939	1,640	3,146,807	4,351	4,762,746	1,362,820	4,149,048	5,511,868
1904....	2,637	1,553,042	1,325	2,675,663	3,962	4,230,705	1,212,145	3,818,560	5,030,705
1905....	3,970	1,803,288	1,692	3,734,349	5,662	5,537,637	1,304,355	4,169,051	5,473,406
1906....	3,922	1,959,252	1,758	4,399,872	5,680	6,359,124	1,632,683	4,941,363	6,574,046
1907....	3,217	2,154,688	3,132	9,961,281	6,349	12,115,969	1,957,334	13,630,831	15,588,165
1908....	3,289	2,603,232	2,004	7,035,655	5,293	9,638,887	2,092,231	10,666,985	12,759,216
1909....	2,597	2,988,936	3,734	14,850,738	6,331	17,839,674	3,366,495	24,494,750	27,861,245
1910....	2,744	3,173,494	5,228	20,187,704	7,972	23,361,198	3,378,268	33,107,419	36,395,687
1911....	2,713	3,108,880	4,068	16,252,340	6,781	19,361,220	3,177,581	27,774,128	30,951,709
1912....	2,643	3,296,229	5,213	22,536,015	7,856	25,832,244	4,090,362	35,579,293	39,669,655
1913....	3,279	3,793,434	5,006	22,181,007	8,285	25,974,441	4,954,734	37,744,590	42,699,324
1914....	3,011	3,473,292	2,966	13,827,870	5,977	17,301,162	3,609,747	23,989,437	27,599,184
1915....	3,000	3,041,003	1,331	5,443,812	4,331	8,484,815	2,561,734	5,189,223	7,750,957
1916....	4,595	4,089,937	2,094	8,703,187	6,689	12,793,124	4,155,911	12,657,738	16,813,649
1917....	3,199	3,182,960	2,138	8,712,604	5,337	11,895,564	2,875,590	12,571,502	15,447,092
1918....	3,067	2,436,560	1,992	7,594,042	5,059	10,030,542	1,336,861	11,576,850	12,913,711
1919....	3,140	2,817,096	929	3,671,634	4,069	6,488,730	1,606,311	2,531,774	4,138,085
1920....	3,239	2,415,775	771	2,725,431	4,010	5,141,206	1,286,251	1,191,567	2,477,818
1921....	3,464	2,676,320	399	1,115,072	3,863	3,791,392	1,483,444	514,148	1,997,592
1922....	3,021	3,010,713	481	1,733,761	3,502	4,744,474	1,258,860	450,200	1,709,060
1923....	3,312	3,915,740	654	2,433,964	3,866	6,349,704	1,775,872	480,057	2,255,929

42.—Traffic through all Canadian Canals during the Navigation Seasons, 1900-1923, by Nationality of Vessel and Origin of Freight.

Years	Canadian Vessels.		United States Vessels.		Freight Carried.					
					Originating in Canada.		Originating in United States.		Total.	
	No.	Registered Tonnage.	No.	Registered Tonnage.	Tons.	P.c. of Total.	Tons.	P.c. of Total.	Tons.	
1900..	21,755	4,129,250	5,502	2,408,985	-	-	-	-	5,013,693	
1901..	20,860	3,980,264	5,634	2,482,274	-	-	-	-	5,665,259	
1902..	22,198	4,485,695	6,433	4,086,439	-	-	-	-	7,513,197	
1903..	23,767	5,212,832	6,695	4,236,475	-	-	-	-	9,203,817	
1904..	21,851	4,772,100	6,253	3,655,905	-	-	-	-	8,256,236	
1905..	23,726	5,191,191	7,085	5,096,241	-	-	-	-	9,371,744	
1906..	25,498	5,526,321	7,319	5,685,315	-	-	-	-	10,523,185	
1907..	28,833	6,328,911	9,328	11,604,834	-	-	-	-	20,543,639	
1908..	29,040	6,780,789	7,489	8,521,139	5,012,147	28.6	12,490,673	71.3	17,502,820	
1909..	22,507	7,811,578	9,996	16,459,322	7,378,057	21.8	26,342,691	78.2	33,720,748	
1910..	25,337	8,931,790	11,462	21,777,297	7,883,614	18.3	35,106,994	81.7	42,990,608	
1911..	25,585	9,172,192	10,780	18,231,622	7,792,907	20.5	30,237,446	79.5	38,030,353	
1912..	27,371	10,237,335	11,375	24,636,190	9,376,529	19.7	38,210,716	80.3	47,587,245	
1913..	28,654	12,078,041	10,739	24,238,788	11,130,875	21.3	40,923,038	78.7	52,053,913	
1914..	26,125	12,050,856	7,742	15,636,414	9,382,206	25.3	27,641,031	74.7	37,023,237	
1915..	21,575	9,398,207	6,415	7,385,101	6,789,423	44.7	8,409,380	55.3	15,198,803	
1916..	23,002	9,839,029	6,800	10,660,839	7,486,962	31.7	16,096,529	68.3	23,583,491	
1917..	21,588	9,831,694	6,594	10,259,772	5,964,369	26.8	16,274,566	73.2	22,238,935	
1918..	18,909	7,800,972	6,791	9,616,200	3,369,477	17.8	15,514,142	82.2	18,883,619	
1919..	20,682	8,735,973	4,092	5,259,173	4,865,831	48.7	6,129,435	51.3	9,995,266	
1920..	23,038	8,521,643	3,826	3,838,890	4,094,044	46.9	4,641,339	53.1	8,735,383	
1921..	25,720	10,079,368	2,969	2,330,178	4,562,028	48.5	4,844,993	51.5	9,407,021	
1922..	26,217	11,059,281	3,735	3,165,054	6,273,227	62.1	3,752,828	37.9	10,026,055	
1923..	27,112	13,013,970	3,399	3,325,809	7,637,485	68.2	3,561,949	31.8	11,199,434	

NOTE.—For Canadian canal traffic from 1886 to 1899, see 1902 Year Book, p. 398.

43.—Traffic through individual Canadian Canals during the Navigation Seasons 1919-1923.

SAULT STE. MARIE CANAL.

Years.	Canadian Vessels.				United States Vessels.				Passen- gers.	Total Freight carried.
	Steam- ers.	Sail.	Total.	Freight Tonnage.	Steam- ers.	Sail.	Total.	Freight Tonnage.		
	No.	No.	No.	Tons.	No.	No.	No.	Tons.	No.	Tons.
1919	2,807	333	3,140	2,817,096	890	39	929	3,671,634	41,099	4,138,085
1920	2,882	357	3,239	2,415,775	666	105	771	2,725,431	43,455	2,477,818
1921	3,234	230	3,464	2,676,320	319	80	399	1,115,072	42,767	1,997,592
1922	2,876	145	3,021	3,010,713	462	19	481	1,733,761	35,696	1,709,060
1923	3,190	122	3,312	3,915,740	640	14	654	2,433,964	35,697	2,255,929

WELLAND CANAL.

1919	2,038	306	2,344	1,924,419	853	16	869	691,595	—	2,170,779
1920	2,009	421	2,430	2,013,817	610	84	694	514,439	—	2,276,072
1921	2,673	365	3,038	2,761,228	714	18	732	568,143	—	3,076,422
1922	2,677	411	3,088	2,867,768	735	78	813	677,967	408	3,391,419
1923	3,881	268	4,149	3,429,604	513	100	613	422,579	12	3,755,912

ST. LAWRENCE CANALS.

1919	3,910	1,972	5,882	3,107,773	878	188	1,066	769,172	72,006	2,891,619
1920	3,774	2,371	6,145	3,233,029	545	268	813	442,250	62,397	3,067,962
1921	6,241	2,165	8,406	3,939,233	674	130	804	545,610	56,905	3,734,065
1922	7,836	2,648	10,484	4,453,716	634	294	928	614,232	72,433	4,319,919
1923	8,184	2,764	10,948	4,907,502	415	237	652	341,423	81,777	4,541,528

CHAMBLY CANAL.

1919	138	245	383	65,604	1	1,039	1,040	107,605	1,403	242,961
1920	135	365	500	77,666	2	1,293	1,295	134,978	1,206	325,322
1921	260	154	394	58,869	2	842	844	87,931	1,149	180,280
1922	270	136	406	57,218	18	994	1,012	107,290	786	183,043
1923	261	174	435	62,936	38	804	842	102,226	827	213,190

ST. PETERS CANAL.

1919	291	864	1,155	78,412	16	1	17	1,522	322	64,879
1920	306	888	1,194	82,908	8	—	8	524	1,881	61,373
1921	340	769	1,109	76,327	4	4	8	698	757	56,123
1922	347	720	1,067	74,702	1	6	7	393	740	52,377
1923	339	640	979	73,035	6	4	10	1,306	486	46,574

MURRAY CANAL.

1919	436	150	586	152,610	16	5	21	2,434	1,099	108,250
1920	504	247	751	142,812	22	11	33	812	3,414	136,235
1921	293	139	432	57,726	41	12	53	1,145	7,104	45,280
1922	366	36	402	15,254	199	—	199	2,306	465	1,843
1923	563	73	636	46,147	268	30	298	3,351	4,392	3,144

OTTAWA CANALS.

1919	510	1,132	1,642	286,089	1	147	148	15,019	21,380	218,438
1920	360	1,013	1,373	249,934	—	178	178	19,195	550	233,329
1921	832	874	1,706	229,469	—	101	101	11,130	2,712	171,769
1922	1,097	833	1,930	282,104	2	265	267	28,650	19,968	213,227
1923	1,156	1,061	2,217	318,239	—	211	211	23,165	28,337	233,092

43.—Traffic through individual Canadian Canals during the Navigation Seasons 1919-1923—concluded.

RIDEAU CANAL.

Years.	Canadian Vessels.				United States Vessels.				Passengers.	Total Freight carried.
	Steamers.	Sail.	Total.	Freight Tonnage.	Steamers.	Sail.	Total.	Freight Tonnage.		
	No.	No.	No.	Tons.	No.	No.	No.	Tons.		
1919	1,502	331	1,833	122,576	—	2	2	192	17,026	103,539
1920	1,271	438	1,709	118,751	7	2	9	1,124	14,785	97,837
1921	1,227	214	1,441	99,832	—	2	2	204	11,484	95,012
1922	1,421	472	1,893	105,840	3	2	5	242	6,319	86,382
1923	1,388	436	1,824	104,279	7	5	12	821	6,299	81,299

TRENT CANAL.

1919	3,011	583	3,594	155,895	—	—	—	—	101,561	52,953
1920	4,871	672	5,543	160,584	25	—	25	137	97,849	53,660
1921	4,589	607	5,196	152,870	26	—	26	245	100,049	44,247
1922	2,985	679	3,664	145,422	23	—	23	213	80,574	43,038
1923	1,803	485	2,288	105,990	47	—	47	974	62,777	31,402

ST. ANDREWS CANAL.

1919	92	31	123	25,499	—	—	—	—	6,160	3,763
1920	93	61	154	26,367	—	—	—	—	4,931	5,775
1921	76	458	534	27,514	—	—	—	—	7,202	6,231
1922	149	113	262	46,524	—	—	—	—	2,130	25,387
1923	191	133	324	50,498	—	—	—	—	—	37,364

SUMMARY.

1919	14,735	5,947	20,682	8,735,973	2,655	1,437	4,092	5,259,173	262,056	9,995,266
1920	16,205	6,833	23,038	8,521,643	1,885	1,941	3,826	3,838,890	230,468	8,735,383
1921	19,765	5,955	25,720	10,079,388	1,780	1,189	2,969	2,330,178	230,129	9,407,021
1922	20,024	6,193	26,217	11,059,261	2,077	1,658	3,735	3,165,054	219,519	10,026,055
1923	20,956	6,156	27,112	13,013,970	1,934	1,405	3,339	3,329,809	220,604	11,199,434

Government Expenditure on Canals.—Tables 44 and 45 deal with the expenditure by the Dominion Government on the construction and maintenance of canals. The items of revenue and expenditure, showing in the fiscal year ended 1923 a slightly smaller annual net outlay as compared with 1922, resulting from a decreased expenditure combined with a lesser decrease in revenue, indicate the net total expended on the maintenance of these water routes. All canals, it may be added, have since 1904 been free of toll to vessels applying for the privilege of locking facilities. The largest single revenue items are those of \$356,740, dues from the government elevator on the Welland canal, and \$209,644, rents from Lachine canal property. The total capital cost of Canadian canals since their construction was begun is set at \$146,420,557.

44.—Total Expenditure and Revenue of Canals, fiscal years ended June 30, 1868-1906, and Mar. 31, 1907-1923.

Fiscal Years.	Expenditure Chargeable—					Total Expenditure.	Total Revenue.
	To Capital. *	To Income.	To Revenue. ¹	For Staff.	For Repairs.		
	\$	\$	\$	\$	\$	\$	\$
Before Confederation.....	20,503,866	98,378	—	—	—	20,602,244	—
1868-1900.....	58,449,977	2,857,040	820,973	7,618,245	5,915,519	75,661,826	12,401,918
1901.....	2,360,570	147,768	61,639	314,095	262,876	3,147,248	315,426
1902.....	2,114,690	216,703	65,771	317,889	263,768	2,978,771	300,414
1903.....	1,823,274	277,596	63,175	390,282	294,114	2,848,441	230,211
1904.....	1,850,787	302,409	66,067	381,017	350,279	2,980,559	79,537
1905.....	2,071,594	354,353	64,515	431,500	401,743	3,323,705	78,009
1906.....	1,552,121	319,877	62,172	447,963	375,889	2,758,022	108,068
1907 (9 months).....	887,839	264,111	66,251	329,630	287,231	1,835,062	105,003
1908.....	1,723,156	508,010	105,519	473,639	411,661	3,221,985	144,882
1909.....	1,873,869	728,125	106,066	475,515	433,958	3,617,533	199,501
1910.....	1,650,707	489,256	111,756	515,585	491,793	3,259,097	193,384
1911.....	2,349,474	440,270	103,398	511,306	471,530	3,875,978	221,138
1912.....	2,500,939	442,012	110,049	585,900	555,710	4,254,610	264,114
1913.....	2,259,257	331,987	121,371	605,248	535,136	3,852,999	307,568
1914.....	2,829,661	389,285	147,729	642,845	574,039	4,583,559	380,188
1915.....	5,490,796	444,730	140,236	675,771	562,599	7,314,132	427,763
1916.....	6,142,149	397,665	139,952	697,532	529,565	7,906,863	446,722
1917.....	4,304,589	399,414	137,907	700,022	486,168	6,028,100	461,423
1918.....	1,781,957	111,553	149,859	743,857	540,331	3,327,557	414,868
1919.....	2,211,935	164,046	156,558	733,091	698,879	3,964,508	387,655
1920.....	4,579,565	798,113	158,153	745,986	713,335	6,995,152	442,193
1921.....	5,449,962	1,193,143	192,944	815,979	920,993	8,573,021	366,011
1922.....	4,482,639	836,810	209,201	983,042	1,105,054	7,616,746	804,519
1923.....	4,995,184	564,242	204,542	924,216	859,839	7,548,025	742,410
Total.....	146,385,591²	13,076,896	3,566,104	21,060,107	18,042,080	202,165,745	19,822,927

¹ Expenditure for Staff and Repairs, canals in general. ² Not including \$34,967, chargeable to canal in general.

NOTE.—For the years 1908 to 1900, see Canada Year Book, 1916-17, page 462.

45.—Capital Expenditure for Construction and Enlargement of Canals for the fiscal years 1868-1923, and before Confederation.

Canals.	Expenditure, previous years.	Expenditure, 1923.	Total Expenditure.
Beauharnois.....	\$ 1,636,690	\$ —	\$ 1,636,690
Carillon and Grenville.....	4,191,756	—	4,191,756
Chambly.....	780,996	—	780,996
Cornwall.....	7,246,304	—	7,246,304
Cubute Lock and Dam.....	382,391	—	382,391
Lachine.....	14,132,685	—	14,132,685
Lake St. Francis.....	75,907	—	75,907
Lake St. Louis.....	298,176	—	298,176
Murray.....	1,248,947	—	1,248,947
Rideau.....	4,210,274	3,990	4,214,264
Sault Ste. Marie.....	4,935,809	—	4,935,809
Soulanges.....	7,904,045	—	7,904,045
St. Anne Lock and Canal.....	1,170,216	—	1,170,216
St. Lawrence River and Canals—			
North Channel.....	1,995,143	—	1,995,143
River Reaches.....	483,830	—	483,830
Galops Channel.....	1,039,896	—	1,039,896
St. Lawrence Ship Canal.....	—	45,146	45,146
St. Ours Lock.....	127,229	—	127,229
St. Peters.....	648,547	—	648,547
Tay.....	489,599	—	489,599
Trent.....	18,850,019	169,655	19,019,674
Welland.....	29,406,406	—	29,406,406
Welland Ship Canal.....	29,620,549	4,776,394	34,396,943
(Farran's Point.....	877,091	—	877,091
Galops.....	6,143,468	—	6,143,468
Rapide Plat.....	2,159,881	—	2,159,881
Williamsburg.....	1,334,552	—	1,334,552
Canals in general.....	34,967	—	34,967
Total.....	\$ 141,425,373	\$ 4,995,184	\$ 146,420,557

¹ The records relating to cost of construction by Imperial Government were destroyed by fire in 1852 and the statistics are not included in this table.

The Panama Canal.—The Panama canal, which was opened to commercial traffic on August 15, 1914, is a waterway which is destined to be of the greatest importance to the British Columbian ports, from which vessels now leave direct for Great Britain and European ports throughout the year. As an alternative route to that of the transcontinental railway lines, such a passage by water is of vital importance in the solution of the larger transportation problems of the continent, and while its influence is perhaps more potential than actual, such a check on transcontinental rail rates is a valuable one. During the war the great expectations based upon the opening of the canal were not realized, owing to the scarcity of shipping, but with the decline in ocean freight rates, an increase in traffic between our Pacific ports and Europe is occurring. While no Canadian vessels passed through the canal in 1923, a tonnage of 92,939 originating from our eastern coast and a total of 101,588 tons destined for ports on our western coast was carried through in British and foreign bottoms. The greater importance of the route as one from Pacific ports to Atlantic Ports is shown by the total of 604,546 ton from western Canadian ports and 125,283 tons destined for eastern Canadian ports, locked through on the voyage eastward. Tables 46 and 47 give the more important figures of nationalities of vessels using the canal facilities, together with the volume of traffic since 1915.

46.—Traffic through the Panama Canal by Nationality of Vessels, years ended June 30, 1920-1923.¹

Nationalities.	1920.		1921.		1922.		1923.	
	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.	Atlantic to Pacific.	Pacific to Atlantic.
	No.	No.	No.	No.	No.	No.	No.	No.
Argentinian.....	—	—	—	—	—	—	1	—
Belgian.....	—	1	1	1	—	—	—	3
Brazilian.....	2	1	1	—	—	—	—	—
British.....	393	360	502	470	533	402	599	466
Canadian.....	—	—	—	—	—	—	—	—
Chilean.....	38	41	40	23	27	26	32	30
Chinese.....	2	—	2	2	—	—	—	—
Colombian.....	—	1	—	—	—	—	9	9
Costa Rican.....	—	1	8	8	1	—	1	—
Cuban.....	—	—	—	1	—	—	—	—
Danish.....	4	5	28	32	25	28	29	36
Dutch.....	17	12	26	24	34	32	56	53
Ecuadorian.....	—	—	—	—	—	—	—	—
Finnish.....	—	—	—	2	—	—	—	—
French.....	9	51	26	18	28	23	32	24
German.....	5	12	3	16	20	17	48	40
Greek.....	—	—	—	—	3	2	2	4
Italian.....	13	13	13	12	11	9	15	14
Japanese.....	84	34	86	50	122	67	85	78
Mexican.....	—	—	4	—	6	—	1	1
Norwegian.....	46	60	76	64	68	45	66	78
Panamanian.....	3	1	5	3	3	5	19	12
Peruvian.....	37	38	32	28	30	30	39	41
Portuguese.....	1	1	—	—	—	—	—	—
Russian.....	2	—	1	3	—	—	—	—
Spanish.....	20	21	22	22	4	5	6	7
Swedish.....	10	9	15	10	21	14	13	19
United States.....	493	636	579	631	573	522	1,068	926
Uruguayan.....	1	—	—	—	—	—	—	—
Yugo-Slavian.....	—	—	1	1	—	—	—	—
Total.....	1,180	1,298	1,471	1,421	1,509	1,227	2,125	1,842

¹ From Annual Report of the Governor of the Panama Canal, 1923.

47.—Summary of Commercial Traffic through the Panama Canal, years ended June 30, 1915-1923.¹

Years.	Atlantic to Pacific.		Pacific to Atlantic.		Total Traffic.	
	Vessels.	Cargo Tonnage.	Vessels.	Cargo Tonnage.	Vessels.	Cargo Tonnage.
1915.....	522	2,070,993	553	2,817,461	1,075	4,888,454
1916.....	396	1,369,019	362	1,725,095	758	3,094,114
1917.....	874	2,929,260	929	4,129,303	1,803	7,058,563
1918.....	915	2,639,300	1,154	4,892,731	2,069	7,532,031
1919.....	857	2,740,254	1,167	4,176,367	2,024	6,916,621
1920.....	1,180	4,092,516	1,298	5,281,983	2,478	9,374,499
1921.....	1,471	5,892,078	1,421	5,707,136	2,892	11,599,214
1922.....	1,509	5,495,934	1,227	5,388,976	2,736	10,884,910
1923.....	2,125	7,086,259	1,842	12,481,616	3,967	19,567,875

¹ From Annual Report of the Governor of the Panama Canal, 1923.

IX.—SHIPPING AND NAVIGATION.

Canadian shipping may be divided into two classes, ocean shipping and that on inland waters. Whereas, in the case of most countries of such an extensive coast line, the former is much the more important, in Canada, shipping on inland waters, while finally dependent to a large extent on ocean traffic to foreign ports, shares almost equally with that of the Atlantic and Pacific oceans the attention devoted to water traffic.

Ocean Shipping.—Canadian ocean shipping dates back to the days of early European fishermen who frequented the shores of Newfoundland and the Maritime Provinces. Ocean-going vessels of that time were crude, wooden sailing craft of but 20 or 30 tons burden, to be entrusted only to the guidance of hardy mariners for navigation through nearly unknown seas. Later exploration and settlement produced a larger volume of traffic, but it was not until the building of ships in Canada by the French assumed some dimensions that traffic became important. The first ocean-going vessels in Canada were probably built by Pont-Gravé, one of the first settlers in New France, and soon afterwards Talon and Hocquart, intendants of the colony, realizing the advantages offered to the industry by the timber resources available, gave it every encouragement. Shipyards were established at Quebec and other points along the St. Lawrence, and these, together with later establishments on the western coast, have formed one of the principal bases of Canadian shipping on the Atlantic and the Pacific.

Canadian shipping attained some prominence in the days of fast, wooden sailing vessels, and also at a later date when steam power first came into use. In 1833 the *Royal William*, a Canadian ship built to ply between Quebec and Halifax, crossed the Atlantic from Pictou to London, the first vessel to navigate the Atlantic under steam power. A few years later Samuel Cunard established the well known steamship line of that name. His company pursued a conservative course; wooden ships were used long after iron hulls were a proven success, and paddle wheels after the introduction of the screw propeller. By 1867 the company's business had shifted to New York, and its terminal was moved there from Halifax. The Allan line had a somewhat similar early history, but remained a purely Canadian company. In addition to other lines of less importance, both the C.P.R. and the Dominion Government, the latter in connection with the Canadian National Railway system, operate fleets on the Atlantic and the Pacific oceans.

In the following tables, statistics are given of sea-going vessels entered and cleared at Canadian ports during the fiscal years 1922 and 1923, of entrances and clearings at principal ports during the latter year, and related matters. The number and particularly the tonnage of vessels entered and cleared from Canadian ports in both ocean and coasting trade, indicates clearly the predominance of British shipping in Canadian waters over that of all other nations. This is particularly the case on the Atlantic coast, where the bulk of our European and South American trade is handled. Figures for 1923 show continued revival in the shipping industry.

48.—Sea-going Vessels (exclusive of Coasting Vessels) Entered and Cleared at Canadian Ports during the fiscal years ended Mar. 31, 1922 and 1923.

Nationalities.	Number of of Vessels.	Tons Register.	Freight.		Number of Crew.
			Tons Weight.	Tons Measure- ment.	
1922.					
ENTERED.					
British.....	2,152	5,408,055	539,404	216,217	155,186
Canadian.....	7,330	3,348,830	1,061,740	73,857	146,332
Foreign.....	8,675	4,863,298	1,337,250	26,150	146,824
Total.....	18,157	13,620,183	2,938,394	316,224	448,342
CLEARED.					
British.....	2,087	5,063,348	3,731,087	323,785	134,538
Canadian.....	7,599	3,512,372	1,714,569	347,751	153,787
Foreign.....	8,495	5,398,567	2,812,046	233,659	151,851
Total.....	18,181	13,974,287	8,257,702	905,195	440,176
TOTAL ENTERED AND CLEARED.					
British.....	4,239	10,471,403	4,270,491	540,002	289,724
Canadian.....	14,929	6,861,202	2,776,309	421,608	300,119
Foreign.....	17,170	10,261,865	4,149,296	259,809	298,675
Total.....	36,338	27,594,470	11,196,096	1,221,419	888,518
1923.					
ENTERED.					
British.....	2,473	7,237,733	1,394,317	209,002	188,517
Canadian.....	8,199	3,576,451	1,140,474	41,223	147,357
Foreign.....	8,790	6,281,699	1,945,409	33,884	163,361
Total.....	19,462	17,095,883	4,480,200	284,109	499,237
CLEARED.					
British.....	2,396	6,631,172	4,356,260	471,494	165,583
Canadian.....	8,494	3,887,358	2,156,653	430,604	152,683
Foreign.....	8,703	6,663,924	4,511,669	424,129	170,970
Total.....	19,593	17,182,454	11,024,582	1,326,227	489,236
TOTAL ENTERED AND CLEARED.					
British.....	4,869	13,868,905	5,750,577	680,496	354,100
Canadian.....	16,693	7,463,809	3,297,127	471,827	300,040
Foreign.....	17,493	12,945,623	6,457,078	458,013	334,331
Total.....	39,055	34,278,337	15,504,782	1,610,336	988,471

49.—Sea-going Vessels Entered and Cleared at the Principal Ports of Canada, fiscal year ended Mar. 31, 1923.

Ports.	British.		Foreign.		Total.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
Alert Bay, B.C.	17	3,128	82	2,056	99	5,184
Anxox, B.C.	29	22,358	16	19,518	45	41,876
Baddeck, N.S.	85	3,647	60	70,995	145	74,642
Bathurst, N.B.	36	2,572	12	12,183	48	14,755
Bonne Espérance, Que.	56	10,684	4	2,312	60	12,996
Bridgewater, N.S.	35	10,806	2	506	37	11,312
Britannia Beach, B.C.	44	18,066	6	8,970	50	27,036
Campbellton, N.B.	21	39,505	46	60,531	67	100,036
Campobello, N.B.	312	52,487	335	8,137	647	60,604
Canso, N.S.	240	34,487	302	19,169	542	53,636
Charlottetown, P.E.I.	75	60,110	13	12,684	88	102,794
Chatham, N.B.	17	43,534	20	25,491	37	69,025
Chemainus, B.C.	144	84,364	57	19,613	201	103,977
Digby, N.S.	44	10,455	27	5,438	71	15,893
Gaspé, Que.	47	70,834	22	27,044	69	97,878
Halifax, N.S.	1,606	2,708,054	530	709,888	2,136	3,617,942
Hantsport, N.S.	28	13,811	18	29,856	46	43,667
Hillsboro, N.B.	52	33,421	28	20,048	80	53,469
Ladysmith, B.C.	1,010	185,152	119	76,403	1,129	261,555
La Have, N.S.	195	24,833	12	528	207	25,411
Lévis, Que.	2	5,396	1	3,656	3	9,052
Liverpool, N.S.	140	24,724	290	26,139	430	50,863
Lockport, N.S.	59	2,278	63	4,070	122	6,348
Lord's Cove, N.B.	200	2,170	189	2,431	489	4,601
Louisburg, N.S.	155	157,565	233	80,579	388	238,144
Lower East Pubnico, N.S.	34	1,084	53	2,511	87	3,595
Lunenburg, N.S.	628	71,734	28	2,378	656	74,112
Moncton, N.B.	22	11,140	4	6,218	26	17,358
Montreal, Que.	1,278	5,076,522	551	1,570,259	1,829	6,646,781
Nanaimo, B.C.	545	165,604	1,975	510,060	2,520	675,664
Newcastle, N.B.	15	16,865	13	15,311	28	32,176
New Westminster, B.C.	51	91,165	31	88,264	82	179,429
North Head, N.B.	379	55,396	52	581	431	55,977
North Sydney, N.S.	1,139	312,517	416	197,856	1,555	510,373
Ocean Falls, B.C.	50	86,741	11	16,475	61	103,216
Parrsboro, N.S.	194	44,311	72	20,031	266	64,342
Port Alberni, B.C.	12	26,148	31	54,594	43	80,742
Powell River, B.C.	185	178,463	168	87,115	353	265,578
Port Alfred, Que.	18	37,275	50	87,944	68	125,219
Port Hawkesbury, N.S.	97	16,339	52	7,092	149	23,431
Port Hastings, N.S.	9	7,427	28	34,068	37	41,495
Prince Rupert, B.C.	2,052	171,248	2,733	115,133	4,785	286,381
Quatsino, B.C.	9	15,770	15	38,293	24	54,063
Quebec, Que.	307	1,934,572	55	130,140	362	2,064,712
Rimouski, Que.	12	25,084	24	37,552	36	62,636
St. Andrew's, N.B.	880	45,695	1,362	22,707	2,242	68,402
St. George, N.B.	63	9,257	139	9,688	202	18,945
St. John, N.B.	833	1,456,998	821	764,442	1,654	2,221,440
St. Martin's, N.B.	29	16,868	74	14,434	103	31,302
St. Stephen, N.B.	33	2,420	46	3,128	79	5,548
Sandy Point, N.S.	27	5,602	316	23,471	343	29,073
Shelburne, N.S.	27	7,057	138	11,101	165	18,158
Sidney, B.C.	98	29,206	723	152,824	821	182,030
Stewart, B.C.	7	4,348	25	14,627	32	18,975
Sydney, N.S.	404	553,649	385	894,040	789	1,447,689
Three Rivers, Que.	26	74,954	41	94,998	67	169,952
Union Bay, B.C.	91	222,367	198	235,615	289	457,982
Vancouver, B.C.	2,124	3,572,409	1,476	2,978,581	3,600	6,550,990
Victoria, B.C.	2,868	2,580,966	1,859	3,119,403	4,727	5,700,369
White Rock, B.C.	267	16,513	96	2,375	363	18,888
Windsor, N.S.	117	79,867	186	234,370	303	314,237
Yarmouth, N.S.	478	316,465	209	7,815	687	324,280

50.—Sea-going Vessels Entered Inwards and Outwards, by Principal Countries, fiscal year ended Mar. 31, 1923.

VESSELS ENTERED INWARDS.

Countries whence arrived.	British.			Canadian.			Foreign.		
	No. of Vessels.	Tons Register.	Crew No.	No. of Vessels.	Tons Register.	Crew No.	No. of Vessels.	Tons Register.	Crew No.
Great Britain.....	761	3,774,920	97,034	137	255,026	3,815	181	411,834	5,532
Australia.....	35	181,502	5,230	19	65,034	775	—	—	—
Gibraltar.....	5	16,020	172	—	—	—	5	14,747	184
British W. Indies.....	98	235,128	6,822	172	124,839	2,916	24	23,703	504
Newfoundland.....	610	273,212	11,093	286	87,400	3,763	110	217,219	2,331
Other British possessions.	9	38,073	846	1	2,823	47	2	5,628	86
Belgium.....	37	276,507	9,842	5	16,658	192	26	90,093	1,075
China.....	30	229,334	6,578	38	235,629	12,654	61	361,636	8,703
Denmark.....	—	—	—	—	—	—	16	48,432	1,698
France.....	5	11,281	147	4	2,517	57	30	85,378	1,159
Germany.....	27	214,480	7,199	5	14,097	190	29	103,939	1,334
Holland.....	16	56,204	725	6	21,279	266	25	84,368	1,040
Italy.....	14	45,790	925	4	8,564	138	21	80,730	1,056
Japan.....	17	135,036	4,313	18	82,274	3,885	112	519,281	10,304
Mexico.....	14	54,639	571	54	126,480	1,044	16	95,753	618
Norway.....	—	—	—	—	—	—	21	48,001	653
Peru.....	3	8,844	133	6	31,794	228	10	28,583	334
St. Pierre.....	21	2,782	146	54	5,176	480	87	18,181	2,129
Philippines.....	11	73,133	1,192	—	—	—	7	32,315	241
Santo Domingo.....	—	—	—	2	2,401	46	25	28,420	671
Spain.....	4	7,598	95	1	147	6	14	19,306	309
United States.....	521	1,467,824	29,667	4,827	2,404,067	100,161	5,759	3,715,491	98,404
Sea fisheries.....	179	15,212	2,385	2,008	71,985	15,325	2,114	83,703	22,044
Other countries.....	33	87,292	1,529	11	15,465	253	78	148,627	2,360
From Sea.....	23	32,922	1,873	541	2,796	1,116	17	16,331	112
Total.....	2,473	7,237,733	188,517	8,199	3,576,451	147,357	8,790	6,281,699	163,361

VESSELS CLEARED OUTWARDS.

Countries to which departed.	No. of Vessels.	Tons Register.	Crew No.	No. of Vessels.	Tons Register.	Crew No.	No. of Vessels.	Tons Register.	Crew No.
Great Britain.....	695	3,157,414	73,251	119	306,948	4,427	274	557,452	7,798
Australia.....	56	257,871	5,738	49	164,927	2,000	9	19,856	192
British Oceania.....	1	3,540	45	19	62,407	754	6	15,341	180
British South Africa.....	17	59,425	806	1	3,357	36	2	3,514	54
British West Indies.....	22	65,113	1,105	119	77,366	1,960	32	25,077	616
Newfoundland.....	609	297,897	11,775	334	129,670	4,537	124	251,703	3,117
British Guiana.....	26	73,512	2,775	14	18,650	346	—	—	—
Gibraltar.....	3	8,119	93	—	—	—	6	21,323	235
Other British possessions.	9	45,312	1,519	13	32,337	614	1	496	3
Argentina.....	8	19,139	289	—	—	—	4	5,304	57
Belgium.....	31	101,047	1,582	3	8,738	102	30	82,668	962
China.....	32	250,106	7,283	39	164,953	7,655	28	192,840	5,050
Cuba.....	7	18,542	403	11	3,766	135	51	56,432	1,131
Denmark.....	5	9,353	142	—	—	—	37	79,080	1,303
Brazil.....	5	14,690	226	2	531	13	1	1,496	19
France.....	42	182,138	4,051	7	21,757	279	80	169,107	2,806
Germany.....	43	228,852	6,416	1	3,007	38	50	156,664	1,789
Greece.....	6	17,884	198	—	—	—	12	41,281	451
Holland.....	43	125,569	1,523	8	29,322	357	42	142,957	1,679
Italy.....	47	133,713	1,910	3	7,757	100	69	242,116	2,789
Japan.....	28	212,065	6,472	33	175,972	8,108	140	684,007	12,902
Mexico.....	13	47,906	578	59	103,246	1,071	17	75,949	628
Norway.....	—	—	—	—	—	—	22	50,843	691
Peru.....	3	8,844	133	3	14,037	104	7	20,101	182
St. Pierre.....	41	3,825	223	67	5,733	484	57	11,883	1,283
United States.....	373	1,193,302	31,099	4,962	2,473,485	102,699	4,705	3,539,593	93,355
Sea fisheries.....	199	22,513	3,484	2,052	65,689	15,411	2,825	106,628	28,863
Other countries.....	11	42,883	648	42	10,734	317	52	94,731	1,639
For Sea.....	21	30,598	1,816	543	2,969	1,136	20	15,482	1,196
Total.....	2,396	6,631,172	165,583	8,494	3,887,358	152,683	8,703	6,663,924	170,970

51.—Sea-going Vessels Entered and Cleared at Canadian Ports with Cargo and in Ballast, fiscal years ended June 30, 1901-1906, and Mar. 31, 1907-1923.

Fiscal Years.	British.		Canadian.		Foreign.		Total Tonnage.
	No.	Tons Register.	No.	Tons Register.	No.	Tons Register.	
1901.....	4,319	6,694,133	9,910	1,677,138	12,476	6,171,791	14,543,062
1902.....	4,363	6,865,924	11,413	1,937,227	14,530	5,928,337	14,731,488
1903.....	4,647	7,753,788	11,282	2,085,568	12,403	6,001,819	15,841,175
1904.....	4,997	8,045,817	11,045	1,979,803	14,002	5,801,085	15,826,705
1905.....	4,614	8,034,652	11,279	2,269,834	11,904	5,283,969	15,588,455
1906.....	5,104	9,059,453	12,201	2,304,942	12,511	5,479,034	16,843,429
1907 (9 mos.).....	4,488	7,576,721	7,880	1,899,141	8,107	4,429,012	13,904,874
1908.....	6,356	10,329,515	10,562	2,606,660	12,886	6,555,096	19,491,271
1909.....	5,795	10,405,370	10,946	2,806,278	13,441	6,554,228	19,765,876
1910.....	5,780	11,038,709	10,875	3,498,361	13,147	6,267,243	20,804,313
1911.....	6,870	12,712,337	10,607	3,341,998	12,467	6,242,851	22,297,186
1912.....	6,766	13,342,929	10,966	4,618,163	15,134	6,628,513	24,589,605
1913.....	7,307	13,896,353	11,810	4,530,835	16,549	7,803,910	26,231,098
1914.....	7,418	15,711,849	12,786	5,160,799	15,811	8,695,838	29,568,486
1915.....	6,949	13,931,091	11,903	4,005,011	15,060	7,466,484	25,402,586
1916.....	6,817	12,417,944	12,386	3,894,731	18,559	8,514,975	24,827,650
1917.....	7,387	16,144,873	12,241	4,343,448	18,500	8,778,753	29,267,074
1918.....	7,337	16,959,790	10,998	4,343,853	16,597	11,483,484	32,787,127
1919.....	6,099	14,054,166	11,115	3,758,528	15,132	7,448,699	25,261,393
1920.....	5,511	12,320,994	11,994	4,434,634	17,353	8,489,126	25,244,754
1921.....	4,526	10,545,619	12,490	5,510,484	17,624	8,860,626	24,916,729
1922.....	4,239	10,471,403	14,929	6,861,202	17,170	10,261,865	27,594,470
1923.....	4,869	13,868,905	16,693	7,463,809	17,493	12,945,623	34,278,337

NOTE.—For 1868-1900, see Canada Year Book, 1911, p. 379.

52.—Sea-going and Inland Vessels (exclusive of Coasting Vessels) arrived at and departed from Canadian Ports, fiscal years ended June 30, 1901-1906, and Mar. 31, 1907-1923.

Fiscal Years.	British.		Canadian.		Foreign.		Total Tonnage.
	No.	Tons Register.	No.	Tons Register.	No.	Tons Register.	
1901.....	4,319	6,694,133	30,211	8,540,089	33,302	10,795,586	26,029,808
1902.....	4,363	6,865,924	33,202	9,654,528	40,148	13,504,952	30,025,404
1903.....	4,647	7,753,788	31,534	10,482,940	53,545	15,418,315	33,655,043
1904.....	4,997	8,045,817	30,934	9,955,290	35,739	13,201,098	31,202,205
1905.....	4,614	8,034,652	29,729	11,047,447	35,647	13,195,721	32,277,820
1906.....	5,104	9,059,453	32,239	11,241,915	37,644	14,430,804	34,732,172
1907 (9 mos.).....	4,488	7,576,721	30,654	11,582,409	25,263	11,436,761	30,595,891
1908.....	6,356	10,329,515	28,795	11,717,846	40,461	17,527,670	39,575,031
1909.....	5,795	10,405,370	29,247	13,805,790	38,677	16,490,443	40,701,603
1910.....	5,780	11,038,709	28,635	15,680,534	41,650	17,848,748	44,567,991
1911.....	6,870	12,712,337	29,670	16,380,146	40,892	18,337,062	47,429,545
1912.....	6,766	13,342,929	27,949	18,069,983	45,399	21,560,215	52,973,127
1913.....	7,307	13,896,353	42,624	20,677,938	47,303	23,275,492	57,849,783
1914.....	7,418	15,711,849	30,234	17,026,121	55,835	29,181,513	61,919,483
1915.....	6,949	13,931,091	29,359	17,504,751	48,635	22,168,311	53,604,153
1916.....	6,817	12,417,944	37,900	17,372,836	75,411	27,930,318	57,721,098
1917.....	7,387	16,144,873	39,978	20,290,252	74,850	29,277,419	65,712,544
1918.....	7,337	16,959,790	34,786	19,890,461	70,781	29,952,237	66,802,488
1919.....	6,099	14,054,166	37,023	17,567,061	52,273	21,607,821	53,229,048
1920.....	5,511	12,320,994	37,388	16,869,619	52,827	20,302,920	49,493,533
1921.....	4,526	10,545,619	39,877	22,236,962	50,370	21,866,049	54,648,630
1922.....	4,239	10,471,403	36,679	20,029,572	61,114	26,164,278	56,665,253
1923.....	4,869	13,868,905	59,364	26,423,287	87,199	32,110,991	72,403,183

NOTE.—For 1868-1900, see Canada Year Book, 1911, p. 380.

53.—British and Foreign Vessels employed in the Coasting Trade of Canada, fiscal years ended Mar. 31, 1919-1923.

Items.	1919.	1920.	1921.	1922.	1923.
VESSELS ARRIVED—					
British—					
Steam.....No.	59,076	61,859	61,187	62,646	68,413
Tons register.....	24,666,439	27,711,784	25,294,751	27,513,247	31,396,583
Number of crew.....	1,129,514	1,209,243	1,207,878	1,249,902	1,344,423
Sail.....No.	13,552	13,143	12,505	12,492	12,632
Tons register.....	2,868,481	2,785,198	2,790,484	3,165,990	3,503,280
Number of crew.....	49,230	48,798	51,958	49,517	47,697
Foreign—					
Steam.....No.	701	594	680	485	1,237
Tons register.....	756,161	521,771	428,017	382,632	1,235,884
Number of crew.....	16,310	12,381	11,092	9,184	23,269
Sail.....No.	343	204	160	147	278
Tons register.....	116,790	50,099	54,293	38,287	104,294
Number of crew.....	2,027	1,227	1,054	1,025	2,273
Description of vessels—					
Steam, screw.....No.	54,465	56,922	56,095	57,753	64,074
Steam, paddle....."	3,841	3,737	4,043	3,809	4,017
Steam, sternwheel....."	1,471	1,794	1,729	1,569	1,559
Sail, ships....."	1	3	7	—	3
Sail, barks....."	2	3	2	3	1
Sail, barkentines....."	1	2	4	1	—
Sail, brigantines....."	2	—	3	3	—
Sail, schooners....."	10,031	9,625	8,810	8,329	7,983
Sail, sloops, barges, canal boats, etc. "	3,858	3,714	3,839	4,303	4,923
VESSELS DEPARTED—					
British—					
Steam.....No.	56,407	59,004	59,794	59,002	66,116
Tons register.....	22,652,010	26,414,821	24,793,946	27,418,694	29,994,010
Number of crew.....	1,083,012	1,153,433	1,191,554	1,227,953	1,315,230
Sail.....No.	15,221	12,859	11,944	12,152	12,403
Tons register.....	2,781,176	2,660,725	2,578,804	3,029,708	3,526,821
Number of crew.....	47,844	46,155	49,892	49,683	46,143
Foreign—					
Steam.....No.	558	454	566	443	1,311
Tons register.....	543,600	350,310	351,522	240,034	1,116,373
Number of crew.....	10,813	8,624	8,697	7,158	23,445
Sail.....No.	266	262	152	128	203
Tons register.....	118,668	57,950	49,396	38,497	92,833
Number of crew.....	2,442	1,400	731	728	1,195
Description of vessels—					
Steam, screw.....No.	51,994	54,334	54,481	54,096	61,790
Steam, paddle....."	3,486	3,323	4,251	3,778	4,051
Steam, sternwheel....."	1,485	1,801	1,628	1,571	1,586
Sail, ships....."	1	1	2	—	2
Sail, barks....."	2	6	5	2	3
Sail, barkentines....."	1	2	1	3	2
Sail, brigantines....."	1	—	5	3	—
Sail, schooners....."	11,787	9,465	8,638	8,207	7,847
Sail, sloops, barges, canal boats, etc. "	3,695	3,647	3,445	4,065	4,752

Inland Shipping.—Inland shipping is associated in its beginnings with the birch-bark canoe of the American Indian. The advantages of this light and easily navigable boat were realized by explorers and fur traders, and for many years it was in general use, giving way to more substantial craft only with the demands of heavier traffic. The bateau and Durham boat came into common use after the migration of the U.E. Loyalists, and, on the St. Lawrence and the other main highways of the time, they also soon gave place to larger vessels. Original plans of the Lachine canal, which called for a width of 12 feet and a depth of 18 inches, afford an illustration of the size of these primitive craft.

In the absence of any roads making land travel possible, the St. Lawrence river and the Great Lakes formed the main highway to the interior.

The route from Montreal to the Upper Lakes was broken at three places—from Montreal to Kingston transportation was by bateau or Durham boat, from Kingston to Queenston schooners were used, then there was the portage road from Queenston to Chippawa and finally, schooner again to the destination. The charge for transporting a barrel of rum from Montreal to Kingston was from \$3.00 to \$3.50, and freight charges on other goods were proportions of the rate on this standard article.

In 1809, the "Accommodation," the first Canadian steamship, was built for the Hon. John Molson, to run between Montreal and Quebec. By 1818 Molson formed a company, the St. Lawrence Steamship Company or the Molson Line. On lake Ontario, the "Frontenac," beginning with 1817, was used on a weekly service between York and Prescott, and following this beginning came a period of great activity in lake and river shipping. In 1845, the "Gore" reached lake Huron by way of the Welland canal to carry on transport trade on the Upper Lakes, where previously there had not been enough traffic to support a large ship. Shipping on the Upper Lakes became brisker now, for there were settlers to be carried from Buffalo to the western United States and grain to be brought back. In this period Canadian shipping made its profit by carrying American goods, for there was little traffic originating in the Canadian near-West.

The period from 1850 to the present has witnessed a general decline in inland shipping, owing to the competition of railways. Considerable traffic is still carried over water routes, however, and the transport of grain, coal and iron ore now forms the basis of considerable fleets of cargo boats on the Great Lakes.

54.—Canadian and American Vessels trading on Rivers and Lakes between Canada and United States, exclusive of ferriage, fiscal years ended Mar. 31, 1919-1923.

Items.	1919.	1920.	1921.	1922.	1923.
VESSELS ARRIVED—					
Canadian—					
Steam and motor.....No.	11,774	11,587	12,420	10,110	20,341
Tons register.....	6,664,144	5,883,911	7,884,184	6,283,053	8,936,612
Number of crew.....	207,523	235,405	288,117	276,557	350,377
Sail.....No.	1,087	967	1,298	712	940
Tons register.....	416,124	269,908	404,180	181,534	340,837
Number of crew.....	5,132	3,653	4,917	3,086	4,164
American—					
Steam and motor.....No.	16,325	16,499	14,089	20,792	33,372
Tons register.....	6,708,059	5,611,030	6,059,367	7,546,477	9,144,512
Number of crew.....	180,420	191,569	169,904	198,725	258,045
Sail.....No.	2,034	1,147	1,550	1,025	1,305
Tons register.....	521,317	319,415	480,733	348,158	442,487
Number of crew.....	6,589	3,912	6,366	3,878	5,222
Description of vessels—					
Steam and motor, screw.....No.	26,992	26,664	25,118	29,741	52,288
Steam and motor, paddle....."	1,031	1,384	1,359	1,140	1,349
Steam and motor, sternwheel....."	76	38	32	21	76
Sail, schooners....."	729	642	809	251	192
Sail, sloops....."	17	11	13	33	40
Sail, barges....."	2,375	1,461	2,026	1,453	2,013
VESSELS DEPARTED—					
Canadian—					
Steam and motor.....No.	11,896	11,847	12,384	10,292	20,388
Tons register.....	6,320,430	5,976,120	8,046,127	6,533,006	9,329,150
Number of crew.....	217,673	236,263	261,338	240,272	351,440
Sail.....No.	1,151	993	1,285	636	1,002
Tons register.....	407,835	305,046	391,987	170,777	352,879
Number of crew.....	5,009	3,963	5,186	3,065	4,223
American—					
Steam and motor.....No.	16,160	16,249	15,140	20,819	33,503
Tons register.....	6,385,048	5,532,881	5,947,482	7,653,349	9,124,909
Number of crew.....	178,345	184,109	169,675	199,306	255,464
Sail.....No.	2,622	1,579	1,967	1,308	1,526
Tons register.....	544,698	350,468	517,851	354,429	453,460
Number of crew.....	7,610	5,150	6,393	4,320	4,820
Description of vessels—					
Steam and motor, screw.....No.	26,983	26,672	26,384	29,914	52,549
Steam and motor, paddle....."	1,027	1,386	1,097	1,180	1,329
Steam and motor, sternwheel....."	46	38	43	17	13
Sail, schooners....."	716	677	536	264	197
Sail, sloops....."	22	10	16	37	46
Sail, barges....."	3,035	1,885	2,700	1,643	2,285

55.—Statement showing by Provinces the total number and tonnage of all Vessels entered and cleared at Canadian Ports during the fiscal year ended March 31, 1923.

Provinces.	Sea-going.				Coastwise.			
	Arrived.		Departed.		Arrived.		Departed.	
	Ves- sels.	Tons register.	Ves- sels.	Tons register.	Ves- sels.	Tons register.	Ves- sels.	Tons register.
Nova Scotia.....	4,879	3,358,324	5,242	3,732,671	20,491	3,481,953	20,152	3,199,015
Prince Edward Island.....	77	44,841	86	61,928	1,621	226,224	1,607	206,128
New Brunswick.....	3,464	1,434,413	3,104	1,375,563	3,601	672,657	3,616	709,022
Quebec.....	1,324	5,011,559	1,223	4,227,056	10,256	7,254,263	10,533	8,249,347
Ontario.....	1	1,497	1	1,497	15,237	12,111,212	12,661	10,480,026
Manitoba.....	1	1,498	1	1,498	—	—	—	—
British Columbia.....	9,716	7,243,751	9,936	7,782,241	31,112	12,374,420	31,225	11,766,807
Yukon.....	—	—	—	—	242	119,312	239	119,692
Total.....	19,462	17,095,883	19,593	17,182,454	82,560	36,240,041	80,033	34,730,037

Provinces.	Rivers and Lakes.				Total.			
	Arrived.		Departed.		Arrived.		Departed.	
	Ves- sels.	Tons register.	Ves- sels.	Tons register.	Ves- sels.	Tons register.	Ves- sels.	Tons register.
Nova Scotia.....	—	—	—	—	25,370	6,840,277	25,394	6,931,686
Prince Edward Island.....	—	—	—	—	1,698	271,065	1,693	268,056
New Brunswick.....	—	—	—	—	7,065	2,107,070	6,720	2,084,585
Quebec.....	3,952	2,136,696	4,485	2,391,478	15,532	14,402,518	16,241	14,867,881
Ontario.....	51,872	16,680,027	51,801	16,824,904	67,110	28,792,736	64,463	27,306,427
Manitoba.....	—	—	—	—	1	1,498	1	1,498
British Columbia.....	24	254	23	251	40,852	19,618,425	41,184	19,549,299
Yukon.....	110	47,471	110	43,765	352	166,783	349	163,457
Total.....	55,958	18,864,448	56,419	19,260,398	157,980	72,200,372	156,045	71,172,889

56.—Vessels built and registered in Canada and Vessels sold to other Countries, fiscal years ended June 30, 1901-1906, and Mar. 31, 1907-1923.

Fiscal Years.	Built.		Registered.		Sold to other Countries.		
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	Value.
1901.....	240	21,956	327	35,156	5	4,490	\$ 66,468
1902.....	260	28,288	316	34,236	27	11,360	235,865
1903.....	295	30,856	312	41,405	21	11,172	220,602
1904.....	214	28,397	243	33,192	11	7,208	87,115
1905.....	248	21,865	335	27,583	21	3,696	100,363
1906.....	323	18,724	420	37,639	45	9,487	187,725
1907 (9 months).....	229	33,205	257	31,635	17	3,855	68,190
1908.....	361	49,928	357	78,144	28	4,515	132,900
1909.....	303	29,023	277	32,599	16	3,644	98,643
1910.....	264	24,059	220	33,383	14	5,047	133,900
1911.....	247	22,812	234	50,006	17	5,885	201,526
1912.....	326	31,065	302	30,021	18	4,265	140,750
1913.....	324	24,325	328	30,225	20	7,976	610,650
1914.....	289	46,887	230	46,909	27	8,258	169,618
1915.....	224	45,721	237	55,384	21	17,044	1,150,950
1916.....	167	13,497	325	102,239	21	4,529	192,575
1917.....	184	28,638	334	105,826	47	24,954	4,398,570
1918.....	216	53,912	336	70,350	63	25,252	5,330,850
1919.....	277	104,444	327	102,883	85	48,965	14,612,338
1920.....	352	164,074	459	237,022	68	53,407	17,819,477
1921.....	220	95,838	323	188,915	69	34,623	8,456,573
1922.....	143	78,409	228	131,732	35	25,462	3,399,450
1923.....	154	14,868	274	57,446	18	26,394	1,009,327

NOTE.—For 1874-1900, see Canada Year Book, 1911, p. 383. For information regarding the shipbuilding industry in Canada, see pages 437-439 of the present volume.

57.—Number and net Tonnage of Vessels on the Registry of Shipping of Canada, by Provinces, calendar years 1913-1922.

Provinces.	1913.		1914.		1915.		1916.		1917.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
P. E. Island.....	149	10,071	149	10,029	158	11,518	155	10,652	157	10,955
Nova Scotia.....	2,106	138,107	2,098	135,053	2,087	125,567	2,064	123,058	2,010	119,805
New Brunswick..	1,031	60,020	1,052	55,522	1,068	56,219	1,074	49,817	1,074	49,883
Quebec.....	1,628	247,225	1,663	259,143	1,590	267,897	1,452	273,770	1,391	283,942
Ontario.....	2,012	279,642	2,100	314,660	2,111	312,971	2,116	328,531	2,079	311,283
Manitoba.....	93	5,545	103	7,999	84	7,480	95	8,953	90	9,834
Saskatchewan....	5	356	5	529	5	530	5	530	5	530
British Columbia	1,506	153,059	1,591	147,192	1,643	144,835	1,687	145,525	1,734	183,002
Yukon Territory..	15	2,940	11	2,295	11	2,295	11	2,295	10	2,204
Total.....	8,545	896,965	8,772	932,422	8,757	929,312	8,659	943,131	8,559	971,438

Provinces.	1918.		1919.		1920.		1921.		1922.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
P. E. Island.....	158	10,805	158	10,726	143	9,993	137	9,560	138	9,615
Nova Scotia.....	1,948	124,517	1,965	158,100	1,709	152,130	1,550	153,461	1,523	146,329
New Brunswick..	1,043	49,483	1,018	42,050	917	38,634	859	40,456	866	39,107
Quebec.....	1,318	275,235	1,340	342,424	1,321	409,442	1,252	449,817	1,693	316,524
Ontario.....	2,064	312,865	1,986	320,065	1,793	313,875	1,681	306,944	1,314	459,207
Manitoba.....	96	9,791	89	9,160	83	9,119	86	9,599	6	486
Saskatchewan....	5	529	5	529	4	393	5	447	4	813
British Columbia	1,928	231,513	2,006	207,708	1,930	217,481	1,908	252,876	2,006	259,103
Yukon Territory..	8	2,040	6	1,133	4	813	4	813	91	10,340
Total.....	8,568	1,016,778	8,573	1,091,895	7,904	1,151,880	7,482	1,223,973	7,641	1,241,524

NOTE.—The results of the census of registered vessels made by the Dominion Bureau of Statistics recorded on January 1, 1919, only 5,849 vessels of 893,865 tons, in comparison with the 8,568 vessels of 1,016,778 tons shown above. Further details may be found in the Census of Registered Vessels in Canada, 1918.

The Department of Marine and Fisheries.—Administration of the general shipping interests of Canada is in the hands of the Department of Marine and Fisheries. Its more important functions include: (1) administration of the Canada Shipping Act and other Acts of the Dominion Government relating to marine transportation; (2) pilotage; (3) the construction and maintenance of lighthouses, lightships, fog alarms, buoys and beacons; (4) ports, harbours, piers, wharves and breakwaters; (5) the Meteorological Service of Canada; (6) sick and distressed seamen, and the establishment, regulation and management of marine and seamen's hospitals; (7) river and harbour police; (8) inquiries into the causes of shipwrecks and casualties and the collection of wreck statistics; (9) the inspection of steamboats; (10) the construction and maintenance of the St. Lawrence River ship canal and (11) the maintenance of winter communication between Prince Edward Island and the mainland. The net revenue of the Department for the fiscal years ended March 31, 1922 and 1923, was \$701,497 and \$574,567 respectively, and the expenditure for the same periods was \$20,419,883 and \$13,156,182, as compared with \$26,038,902 in the fiscal year ended March 31, 1921.

58.—Revenue of the Department of Marine, fiscal years ended Mar. 31, 1918-1923.

Heads of Revenue.	1918.	1919.	1920.	1921.	1922.	1923.
	\$	\$	\$	\$	\$	\$
Harbours, piers and wharves.....	95,259	76,760	71,210	106,047	79,492	93,355
Earnings of Dominion steamers.....	9,581	13,621	13,181	4,051	269	854
Decayed pilots' fund.....	5,316	5,005	5,304	7,281	8,417	10,619
Steamboat inspection fund.....	1,589	1,486	3,049	73,306	117,819	125,731
Steamboat engineers' fees.....	1,204	1,288	1,545	—	—	—
Sick mariners' fund.....	63,636	69,244	46,314	—	—	—
Examination, masters and mates.....	4,486	3,274	3,863	4,232	3,269	3,998
Casual revenue, sundries.....	46,225	224,547	112,965	123,895	373,727	78,432
St. John pilotage dues.....	—	—	—	25,892	43,197	55,485
St. John superannuation.....	—	—	—	—	6,841	6,658
Halifax pilotage dues.....	—	—	—	47,447	60,486	62,205
Halifax pilots' general account.....	—	—	4,261	—	—	—
Halifax pilots' pension fund.....	—	—	4,664	1,527	—	—
Halifax superannuation.....	—	—	—	—	4,113	3,110
Sydney pilotage fund.....	—	—	—	—	—	44,965
Sydney superannuation.....	—	—	—	—	—	6,745
Radio revenue.....	—	—	—	—	—	38,925
Fines and forfeitures.....	—	—	—	—	—	2,247
W. A. licenses fees.....	—	—	—	—	—	16,217
British Columbia, pilotage revenue.....	—	—	34,521	—	—	—
Miscellaneous.....	1,516	954	2,125	2,939	3,867	2,225
Capital account.....	—	—	—	—	—	22,766
Total revenue.....	228,812	396,779	303,002	396,617	701,497	574,567

59.—Expenditure of the Department of Marine, fiscal years ended Mar. 31, 1918-1923.

Heads of Expenditure.	1918.	1919.	1920.	1921.	1922.	1923.
	\$	\$	\$	\$	\$	\$
Ocean and River Service—						
Boilers for SS. "Montcalm".....	—	—	37,750	—	—	—
Life-saving service.....	—	—	—	59,685	66,825	60,690
Motor patrol in B.C.....	—	—	—	69,121	1	1
Repairing the "Arammore".....	—	—	—	76,217	—	—
Dominion steamers and icebreakers.....	1,108,539	1,193,371	1,447,842	1,799,421	1,510,159	1,367,420
Two steamers for Maritime Provinces.....	—	102,656	—	—	—	—
Wrecking plants (subsidiy).....	42,500	35,000	35,000	35,000	35,000	35,000
Allowance to relatives of crew of the "Lambton".....	—	—	—	—	—	30,500
Boat to replace "Lambton".....	—	—	—	—	—	80,000
Examination, masters and mates.....	—	—	—	—	—	18,308
Other items of expenditure.....	41,635	33,822	37,910	42,171	72,905	35,689
Total.....	1,192,674	1,364,849	1,558,592	2,081,615	1,684,389	1,627,607
Lighthouse and Coast Service—						
Agencies and contingencies.....	165,967	171,270	177,146	188,475	190,953	190,419
Administration of pilotage.....	52,068	91,077	103,913	120,040	92,128	109,004
Salaries and allowances to lightkeepers.....	464,091	519,103	599,979	644,768	649,299	649,856
Maintenance and repairs to lighthouses, etc.....	700,707	668,050	751,953	786,389	794,954	790,894
Construction of lighthouses, etc.....	357,543	349,291	357,853	398,146	399,982	397,433
Breaking of ice.....	25,141	39,515	40,000	40,000	56,000	40,000
Motor patrol in B.C.....	—	—	—	—	5,879	—
Signal service.....	53,254	54,236	59,840	68,735	74,848	86,068
Other items of expenditure.....	41,538	18,705	29,321	16,565	16,723	42,811
Total.....	1,860,309	1,911,247	2,120,005	2,263,118	2,280,766	2,306,455
Public Works, chargeable to Capital—						
Ship Channel, river St. Lawrence.....	656,422	425,333	484,186	507,212	567,371	658,934
Dredging plant, river St. Lawrence, Montreal to Father Point.....	94,537	70,913	65,964	—	—	—
Shipbuilding.....	—	—	33,014,390	19,994,514	5,592,703	—
Award, estate D. J. McCarthy.....	—	—	3,228	—	—	—
Allowance to Mrs. I. Pinard.....	—	—	—	—	—	—
Six salt-water tugs.....	—	46,528	—	—	—	—
New icebreaker.....	—	—	—	972	457,657	—
Sorel shipyard.....	—	—	—	100,414	47,248	89,322
Sea-going dredge.....	—	—	—	—	—	89,855
Self-propelling barge.....	—	—	—	—	—	226,460
Total.....	750,959	542,774	33,567,768	20,603,112	6,664,979	1,064,580

¹ Now under Lighthouse and Coast Service.

59.—Expenditure of the Department of Marine, fiscal years ended Mar. 31, 1918-1923—concluded.

Heads of Expenditure.	1918.	1919.	1920.	1921.	1922.	1923.
	\$	\$	\$	\$	\$	\$
Scientific Institutions— Meteorological Service— Total	193,237	188,188	200,734	208,592	251,890	251,583
Compassionate allowance to dependants of SS. "Simcoe".....	—	61,500	—	—	—	—
Honorarium to T. J. Rowan.....	—	350	—	—	—	—
Marine hospitals, etc.....	53,169	74,291	48,562	—	—	—
Steamboat inspection.....	70,381	72,874	82,633	97,704	103,670	110,458
Naval Service.....	—	—	—	—	—	699,325
Departmental salaries.....	211,148	212,390	222,399	231,810	268,380	385,249
Contingencies.....	29,621	30,702	36,140	58,671	48,713	66,917
Bonus.....	—	—	461,512	234,448	270,221	177,355
Gratuities.....	—	—	2,825	3,264	2,507	4,906
Steel purchase.....	—	—	—	189,920	—	—
Classification arrears.....	—	—	—	65,998	35,783	1,200
Retirement Act.....	—	—	—	850	—	—
Superannuation No. 4.....	—	—	—	—	11,050	8,354
Exchequer Court Awards.....	—	—	—	—	83,143	—
Governor-General's warrants.....	—	—	—	—	70,838	—
Montreal Harbour Commission.....	—	—	—	—	2,303,000	1,802,000
Quebec Harbour Commission.....	—	—	—	—	14,600	284,200
Vancouver Harbour Commission.....	—	—	—	—	1,581,000	2,289,000
Imperial Government.....	—	—	—	—	13,008	430,043
Victoria, B.C., shipowners.....	—	—	—	—	39,746	5,157
Demobilization.....	—	—	—	—	4,609,321	—
Consolidated revenue.....	—	—	—	—	83,143	1,501,273
Miscellaneous and unforeseen.....	—	—	—	—	—	140,489
Total expenditure	4,361,498	4,459,165	38,301,689	26,638,902	20,419,883	13,156,182

60.—Total Revenue and Expenditure of the Department of Marine, fiscal years ended June 30, 1868-1906, and Mar. 31, 1907-1923.

Years.	Revenue.	Expenditure.	Years.	Revenue.	Expenditure.	Years.	Revenue	Expenditure.
	\$	\$		\$	\$		\$	\$
1868.....	71,811	371,071	1887.....	102,238	917,557	1906.....	139,475	5,066,253
1869.....	75,351	360,900	1888.....	99,920	883,251	1907.....	108,260	3,637,600
1870.....	71,490	367,189	1889.....	99,940	1,023,801	1908.....	177,591	5,274,774
1871.....	70,254	389,537	1890.....	115,507	807,417	1909.....	169,502	5,498,531
1872.....	79,324	518,958	1891.....	104,248	885,410	1910.....	156,957	4,692,771
1873.....	114,756	706,818	1892.....	106,582	861,427	1911.....	154,492	4,197,420
1874.....	108,350	845,151	1893.....	107,390	898,720	1912.....	185,579	4,911,141
1875.....	91,235	844,586	1894.....	165,870	905,654	1913.....	185,725	5,213,223
1876.....	107,984	970,146	1895.....	99,557	895,828	1914.....	217,034	5,828,027
1877.....	105,907	820,054	1896.....	103,012	793,634	1915.....	795,550 ²	6,202,908
1878.....	100,850	786,156	1897.....	111,009	867,773	1916.....	461,457	5,621,611
1879.....	84,144	755,359	1898.....	120,602	856,192	1917.....	574,498	4,768,784
1880.....	91,942	723,391	1899.....	126,528	1,102,602	1918.....	228,812	4,361,498
1881.....	108,304	761,731	1900.....	130,229	982,562	1919.....	396,779	4,459,165
1882.....	109,125	774,832	1901.....	144,919	1,029,925	1920.....	303,002	38,301,080
1883.....	104,383	825,011	1902.....	148,607	1,501,619	1921.....	396,617	26,038,902
1884.....	118,080	927,242	1903.....	139,876	1,671,495	1922.....	701,497	20,419,883
1885.....	101,268	1,129,901	1904.....	128,507	2,150,940	1923.....	574,567	13,156,182
1886.....	91,885	980,121	1905.....	121,815	4,747,723			

¹ Nine months. ² Includes \$493,000, sale of steamer "Earl Grey," sold to Russian Government.

Steamboat Inspection.—The Steamboat Inspection Service of Canada, maintained under the authority of the Marine and Fisheries Department, comprises the Board of Steamboat Inspection, together with staffs of inspectors at the principal ocean and inland ports. The Board decides on the standards to be required of all vessels coming under its jurisdiction, which must be attained by all ships given official warrant as to their seaworthiness and mechanical condition. Besides, the Board grants certificates of competency to engineers of steamboats.

A table showing the number and tonnage of steamboats inspected during the fiscal year ended Mar. 31, 1923, follows.

61.—Steamboat Inspection during the fiscal year ended Mar. 31, 1923.

Divisions.	Number of Vessels Inspected.				Number of Vessels not Inspected.	
	Vessels registered or owned in the Dominion.		Vessels registered or owned elsewhere.			
	No.	Gross Tonnage.	No.	Gross Tonnage.	No.	Gross Tonnage.
Halifax.....	156	163,775	9	22,787	17	2,006
St. John.....	104	56,171	3	11,505	72	102,908
Quebec.....	65	39,954	1	348	22	2,197
Sorel.....	103	43,169	1	150	32	1,269
Montreal.....	166	265,761	1	2,990	93	26,501
Kingston and Toronto.....	330	260,979	43	33,940	21	8,215
Collingwood.....	96	19,096	1	1,757	13	1,529
Port Arthur.....	84	21,609	—	—	54	4,146
Edmonton.....	50	7,792	—	—	27	3,404
Vancouver.....	237	161,206	6	41,733	37	22,197
Victoria.....	123	98,998	24	109,635	13	3,513
Total.....	1,514	1,138,510	89	224,845	401	177,885

Divisions.	Number of Vessels subject to inspection when in commission.	Number of Vessels added to the Dominion register.	Number of Vessels lost, broken up or destroyed.
Halifax.....	182	1	2
St. John.....	179	1	2
Quebec.....	88	3	1
Sorel.....	136	1	7
Montreal.....	260	5	3
Kingston and Toronto.....	394	9	10
Collingwood.....	110	4	3
Port Arthur.....	138	1	2
Edmonton.....	77	2	2
Vancouver.....	280	8	4
Victoria.....	160	4	2
Total.....	2,004	39	38

Fees collected during the year on account of inspections totalled \$110,978, and those on account of examinations of engineers amounted to \$1,327, giving a combined total revenue collected by inspectors of \$112,305.

Seamen Shipped and Discharged.—Table 62 shows, for each year from 1908 to 1922, the number of seamen shipped and discharged at Canadian ports under the provisions of the Canada Shipping Act (R.S. 1906, c. 113, ss. 141-143).

62.—Number of Seamen Shipped and Discharged at Canadian Ports, calendar years 1908-1922.

Years.	Seamen Shipped.	Seamen Discharged.	Years.	Seamen Shipped.	Seamen Discharged.
1908.....	18,013	11,542	1915.....	22,797	14,319
1909.....	20,502	11,573	1916.....	20,902	16,689
1910.....	16,735	11,069	1917.....	16,998	14,145
1911.....	13,748	11,301	1918.....	16,516	12,930
1912.....	13,708	11,290	1919.....	18,208	13,649
1913.....	16,975	13,749	1920.....	22,569	19,719
1914.....	18,987	14,989	1921.....	18,444	17,103
			1922.....	25,689	24,558

Wrecks and Casualties.—The statement in Table 63, supplied by the Department of Marine, applies to vessels of every nationality in respect of wrecks and casualties in Canadian waters and to Canadian vessels in respect of wrecks and casualties in other waters. The returns in some years cover wrecks and casualties of previous years.

63.—Canadian Wrecks and Casualties for 1870-1900, for the years ended June 30, 1901-1917, and for the calendar years 1918-1922.

Years.	Casualties.	Net tonnage.	Lives lost.	Stated damages.	Years.	Casualties.	Net tonnage.	Lives lost.	Stated damages.
	No.	Tons.	No.	\$		No.	Tons.	No.	\$
1870-1900.....	9,670	3,577,367	5,096	61,525,760	1913.....	275	270,905	160	1,963,870
1901.....	136	47,181	126	285,782	1914.....	255	210,368	1,083 ¹	4,983,775
1902.....	222	105,814	132	835,916	1915.....	280	214,036	70	1,459,012
1903.....	237	162,297	32	409,991	1916.....	308	242,996	67	1,377,442
1904.....	192	81,143	9	489,699	1917.....	239	715,384	152	4,850,145 ²
1905.....	178	79,588	15	621,267	1918.....	226	312,928	402 ³	1,818,895
1906.....	220	139,586	149	573,420	1919.....	240	205,720	100	1,808,690
1907.....	317	131,441	55	672,466	1920.....	227	222,928	28	1,643,825
1908.....	307	120,269	34	1,390,891	1921.....	260	588,503	38	1,809,328
1909.....	343	189,906	24	1,131,966	1922.....	277	604,423	27	451,312
1910.....	321	211,565	101	1,569,580	1923.....	376	480,713	50	3,184,749
1911.....	271	122,619	48	942,093					
1912.....	293	269,569	59	1,053,768	Total.....	15,670	9,307,249	8,057	96,853,642

NOTE.—For details for the years 1870-1900, see Canada Year Book, 1911, p. 381.

¹ Includes 1,042 lives lost in the "Empress of Ireland" disaster. ² Excluding damage to cargo estimated at \$4,310,350. ³ Includes 328 lives lost in the "Princess Sophia" disaster.

64.—Comparative Statement of Marine Danger Signals, fiscal years ended Mar. 31, 1913-1923.

Description.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Lights.....	1,393	1,461	1,521	1,555	1,560	1,575	1,577	1,578	1,588	1,602	1,596
Light ships.....	12	12	12	12	12	9	9	10	9	9	9
Light boats.....	1	1	1	1	1	1	1	1	—	—	—
Light keepers.....	1,020	1,040	1,066	1,099	1,126	1,128	1,122	1,120	1,130	1,118	1,105
Fog whistles.....	14	13	11	11	11	11	10	9	8	8	8
Sirens.....	2	2	2	2	2	2	2	1	1	1	1
Diaphones.....	89	98	105	110	113	124	128	131	134	135	138
Fog bells.....	26	26	29	31	32	30	29	32	33	35	36
Hand fog horns.....	145	150	148	151	156	154	156	149	148	148	148
Hand fog bells.....	3	3	3	3	3	5	5	4	4	4	4
Gas and whistling buoys.....	299	319	336	327	330	334	339	336	343	345	349
Whistling buoys.....	29	30	31	31	32	32	31	31	30	29	30
Bell buoys.....	71	82	86	89	87	87	86	89	90	90	92
Submarine bells.....	10	13	21	22	22	18	15	12	11	7	7
Fog guns and bombs.....	9	9	9	8	8	8	6	7	7	7	7
Fog horns.....	11	12	10	7	5	3	3	1	1	1	—
Fog alarm stations.....	12	11	12	13	13	13	12	13	13	13	12

NOTE.—Besides the foregoing, in 1923 there were 50 lighted spar-buoys, floats and dolphins, 5,109 unlighted buoys and 419 unlighted tripods, floats, dolphins, spindles and beacons.

Canadian Government Merchant Marine.

During the closing years of the war, the Dominion Government, realizing the need for a mercantile fleet, not only as a means of developing Canada's export trade but also as a means of assisting our national railways and of providing employment, placed orders with Canadian shipbuilding firms for the construction of 63 steel cargo vessels of 6 different types. These vessels were intended primarily to co-operate with British shipping in supplying the necessities of war, as well as to provide in times of peace the means of carrying abroad the products of Canada's farms, forests, mines and factories, without which Canada could not hope to take full advantage of the opportunity of expanding her export trade. Prior to Dec. 31, 1919, 19 vessels had been delivered by the builders. Additions were made to the fleet in following years until the total fleet, as at December 31, 1923, numbered 60 vessels of a total deadweight tonnage of 362,844. In regard to ownership and operation, a separate company was organized for each vessel, and the capital stock of each is owned by the Canadian Government Merchant Marine, Limited. Under an operating agreement with each of these companies, the Canadian Government Merchant Marine, Limited, operates all the steamers and keeps a separate account for each company. Promissory notes have been given to the Minister of Finance and Receiver-General for the total capital stock of each vessel, with interest payable at 5½ p.c. per annum.

Early operations proved profitable, and a surplus of \$1,004,233 (without provision for interest charges), was shown for the year ended December 31, 1920. The three subsequent years, however, have shown the effects of the depression in the shipping industry, and annual deficits of \$9,116,144, \$9,649,479 and \$9,368,670 are shown for 1921, 1922 and 1923 respectively. As a result, the Board of Directors has proposed further reductions in the number of vessels (only the larger, speedier, and specialized ships to be retained), the reduction of capital cost (about \$72,000,000) to what may be considered present replacement value (about \$18,000,000), and that interest due the government be payable for each year only if earned after allowing for depreciation, such remission of interest to be applicable for a period of five years. While the financial showing of the venture is an unsatisfactory one, the directors, in their last annual report, point out in explanation the falling off in cargo tonnage available, and particularly on homeward voyages, and the lower earnings from the carriage of lower-priced commodities. It is also noted that much traffic which would otherwise have undoubtedly been handled through private channels was passed on to the government-owned railways.

During 1923 a total of 227 voyages were made, the majority being to the United Kingdom and the European Continent, to the West Indies, Newfoundland, Australia, California and the Orient. On December 31, 1923, 32 vessels were employed on the more important trade routes, 6 in coastwise trade, 7 on the Great Lakes as grain carriers, while 15 were laid up in various ports in Canada.

Offices of the company outside of Canada are located in London, in the West Indies, in Australia, in New Zealand and in Newfoundland, while agencies give the company representation in all the principal shipping centres of the world.

X.—TELEGRAPHS.

Canada's first telegraph line was erected in 1847 between Toronto, Hamilton, St. Catharines and Niagara. In the same year the Montreal Telegraph Co. was organized, and a line built from Quebec to Montreal and Toronto. At the close of

the year, the Montreal Telegraph Co., having absorbed the original one, had 540 miles of wire in use, 9 offices, 35 employees, and had sent out 33,000 messages. Equipment of very high quality was used by the early companies.

Development of new companies was rapid, new lines radiating from Montreal in all directions. The Grand Trunk Telegraph Co., with a line from Quebec to Buffalo, offered considerable opposition to the Montreal Co., and soon a combination of the two with the Great North Western Telegraph Co. was formed. This company controlled telegraph service in Canada until the building of the C.P.R. While private companies extended their service to meet the requirements of the more densely populated areas of the country, the Canadian Government, through its Public Works Department, built and is still operating lines in many other districts, principally outlying communities.

Telegraph Systems.—The Canadian telegraph systems are composed of lines owned by the Dominion Government and by chartered railway and telegraph companies. The Government system includes, besides the lines originally constructed by the Government, those previously owned by the Great North Western Telegraph Co., the Grand Trunk Pacific Telegraph Co., the Canadian Northern Railway Co. and the National Transcontinental Railway. The system is now operated by the Canadian National Telegraph Co. (formerly Great North Western Telegraph Co.).

The Canadian system, in proportion to population, is one of the most extensive in the world, and is operated under considerable climatic and geographic disadvantages. In the operation of railways and in the receipt and despatch of market and press reports its services to the nation are invaluable.

Telegraph Statistics.—A brief summary table giving the more important figures of the operation of Canadian telegraphs in 1921, 1922 and 1923 follows.

65.—Summary Statistics of all Canadian Telegraphs for calendar years 1921-1923.

Items.	Year ended Dec. 31.		
	1921.	1922.	1923.
Gross Revenue..... \$	11,310,989	11,018,762	11,417,284
Operating Expenses..... \$	9,734,299	9,846,425	9,931,845
Net Operating Revenue..... \$	1,576,690	1,172,337	1,485,439
Pole Line Mileage..... Miles	52,784	53,096	53,383
Wire Mileage..... "	250,802	262,343	270,782
Employees..... No.	7,818	8,500	7,565
Number of Offices..... "	4,901	4,762	4,930
Messages, Land..... "	15,013,993	15,271,410	16,150,106
Cablegrams..... "	1,154,787	1,182,053	1,302,224
Amount of Money transferred..... \$	5,150,916	4,404,407	5,326,352

Table 66 gives figures of telegraph operation and line and wire mileage of the various companies for the years 1920 to 1923.

66.—Telegraph Statistics of Chartered Companies for the calendar years 1920-1923.

Companies.	Years	Miles of line.	Miles of wire.	Number of messages. ¹	Number of offices. ⁵
Canadian National Telegraph Co. (formerly Great North Western Telegraph Co.)	1920	19,687	72,126	7,340,585	1,576
	1921	20,361	81,266	8,059,150	1,618
	1922	20,389	89,539	8,394,724	1,566
	1923	20,389	92,545	9,290,916	1,709
Canadian Pacific Railway Co.	1920	14,412	121,002	6,290,074 ³	1,587
	1921	14,419	122,414	5,823,303 ³	1,559
	1922	14,472	125,331	5,169,265 ³	1,456
	1923	14,675	128,008	5,138,850 ³	1,457
Western Union	1920	3,638	16,789	757,067	225
	1921	3,639	16,694	831,096	225
	1922	3,631	16,666	696,375	196
	1923	3,638	18,593	693,108	189
Timiskaming and Northern Ontario Commission. .	1920	341	1,694	142,538	29
	1921	341	1,694	171,313	30
	1922	332	1,683	153,540	29
	1923	332	1,683	166,874	31
Algoma Central Railway ⁴	1920	334	729	—	8
	1921	335	768	—	8
Algoma Eastern Railway ⁴	1920	87	174	—	4
	1921	86	344	—	4
Grand Trunk Pacific Telegraph Co.	1920 ²	2,817	14,204	281,428	152
	1921	2,817	14,186	223,539	150
	1922	2,817	14,185	157,739	150
	1923	2,817	14,185	190,426	136
The North American Telegraph Co., Ltd.	1920	44	547	105,233	24
	1921	44	547	89,981	22
	1922	—	547	83,077	21
	1923	—	515	75,140	21
Dominion Government Telegraph Service.	1921	11,207	14,001	—	1,248
	1922	11,455	14,392	548,181	1,298
	1923	11,532	15,253	519,501	1,342

¹ Cablegrams not included. The total in Table 65 includes messages handled by the Marconi Wire-
less Telegraph Co.

² Statistics of lines in Ontario, Quebec and New Brunswick not included.

³ Not including press messages.

⁴ These are telephone lines and are used for both despatching and commercial business.

⁵ Includes, in the total in Table 65, offices of wireless and cable companies.

Submarine Cables.—Six transoceanic cables have a terminus in Canada—five of them on the Atlantic and one on the Pacific coast. The date on which the cable was first shown to be of commercial value was in 1866, and up to the present their use has greatly increased. The Atlantic cables are controlled by English and American interests. The Pacific cable, from Canada to Australia and New Zealand, has been in operation since 1902, and is owned by a partnership of the Governments of Great Britain, New Zealand, Australia and Canada.

Marconi Wireless.—Since the transmission of the first transatlantic wireless message in 1901 and the organization in Canada of the Marconi Wireless Telegraph Co. in 1903, communication has been established between many stations throughout the country and with the outside world. Plans are at present under way for a wireless route which will encircle the world by means of stations in Canada and other parts of the Empire.

Radiotelegraph Stations.—Table 67 shows the name, situation and range in nautical miles of the radiotelegraph stations in Canada and Newfoundland. The stations are divided broadly into government-owned and licensed commercial

stations. Of the government-owned, a distinction is shown in Table 67 between those operated by the Government and those operated under contract by the Marconi company. Commercial stations are subdivided into private and public.

Table 68 gives the names of Canadian Government steamers that are equipped with radiotelegraph apparatus, with the range in miles for each steamer. A transatlantic commercial wireless service is carried on by the Glace Bay, N.S., station, which works with Ongar, Essex, England, wireless rates per word being slightly less than those by cable.

Table 69 gives the number of messages and words handled and the cost of maintenance for the government stations of the east and west coasts and of the Great Lakes. For the year 1923-24, the total number of messages was 262,657, as compared with 267,849 in 1922-23, and of words handled 6,684,550, as compared with 5,466,698 in 1923-23.

67.—Radio Stations Licensed in Canada, fiscal year ended Mar. 31, 1924.

Names of Stations.	Situation.	Range in nautical miles.
GOVERNMENT-OWNED STATIONS. ¹		
EAST COAST.		
Belle Isle, Nfld.*	Belle Isle Straits.....	250
Point Amour, Nfld.*	Belle Isle Straits.....	150
St. John, N.B.*	Red Head, N.B.....	250
Cape Race, Nfld.*	North Atlantic.....	400
Grindstone Island, Que.*	Gulf of St. Lawrence (Magdalen Island).....	200
Fame Point, Que.*	Gulf of St. Lawrence.....	250
Clark City, Que.*	Gulf of St. Lawrence.....	250
Father Point, Que.*	St. Lawrence River.....	250
Grosse Isle, Que.*	St. Lawrence River.....	100
Quebec, Que.*	St. Lawrence River.....	150
Montreal, Que.*	St. Lawrence River.....	200
Cape Sable, N.S.*	North Atlantic.....	250
North Sydney, C.B.*	North Sydney, C.B.....	100
Camperdown, N.S.*	Entrance to Halifax Harbour.....	250
Sable Island, N.S.*	North Atlantic.....	300
Halifax, N.S.....	Halifax Dockyard.....	100
Louisburg, N.S. ³	Near Glace Bay, N.S.....	-
Direction Finding Stations.		
Canso D/F.....	Nova Scotia.....	150
Cape Race D/F.....	Newfoundland.....	250
Chebucto D/F.....	Nova Scotia.....	150
St. John D/F.....	New Brunswick.....	150
St. Paul Island D/F.....	Nova Scotia.....	150
Yarmouth D/F.....	Nova Scotia.....	150
GREAT LAKES.		
Port Arthur, Ont.*	Port Arthur, Ont.....	350
Sault Ste. Marie, Ont.*	Sault Ste. Marie, Ont.....	350
Tobermory, Ont.*	Entrance Georgian Bay, Ont.....	350
Midland, Ont.*	Georgian Bay, Ont.....	350
Point Edward, Ont.*	Lake Huron.....	350
Port Burwell, Ont.*	Lake Erie.....	350
Toronto, Ont.*	Toronto Island, Ont.....	350
Kingston, Ont.*	Barrie Island Common.....	350
WEST COAST.		
Gonzales Hill, B.C. (Victoria).....	Victoria, B.C.....	250
Point Grey, Vancouver, B.C.....	Entrance Vancouver Harbour.....	150
Cape Lazo, B.C.....	Strait of Georgia, near Comox, B.C.....	350

¹ Of the government-owned stations some only are operated by the Government. The rest are operated by the Marconi Co. and are indicated by an *.

² This is the same station as St. John D/F below, but is included under two headings to indicate its two functions. It is counted only as a D/F station in the summary table (70).

³ Limited coast station, owned and operated by the Marconi W/T Co. of Canada, Ltd.

67.—Radio Stations Licensed in Canada, fiscal year ended Mar. 31, 1924—
concluded.

Names of Stations.	Situation.	Range in nautical miles.
GOVERNMENT-OWNED STATIONS—concluded.		
WEST COAST—concluded.		
Estevan Point, B.C.....	West Coast Vancouver Island, B.C.....	500
Dead Tree Point, B.C.....	South of Graham Island, Q.C.I.....	200
Digby Island, Prince Rupert, B.C.....	Digby Island, Entrance Prince Rupert Harbour	250
Alert Bay, B.C.....	Cormorant Island, B.C.....	350
Bull Harbour, B.C.....	Hope Island, Vancouver Island, B.C.....	350
Pachena D/F Direction Finding Station.....	Pachena Point, B.C.....	200
HUDSON BAY.		
Port Nelson ¹	Hudson Bay.....	750
Pas, Man. ¹	For communication with Port Nelson only....	750
LICENSED COMMERCIAL STATIONS.		
Public Commercial.		
Glace Bay.....	Glace Bay, C.B.....	3,000
Louisburg.....	Glace Bay, C.B.....	1,000
Vancouver.....	Vancouver, B.C.....	7,000
Markham.....	near Toronto, Ont.....	1,000
Bird's Hill.....	near Winnipeg, Man.....	670
Montreal.....	Montreal, Que.....	3,000
La Prairie.....	near Montreal, Que.....	1,000
Private Commercial.		
Thetford Mines.....	Thetford Mines, Que.....	200
Shawinigan Falls.....	Shawinigan Falls, Que.....	200
Maisonneuve.....	Montreal, Que.....	200
Swanson Bay.....	Swanson Bay, B.C.....	150
Ocean Falls.....	Cousins Inlet, B.C.....	150
Buckley Bay.....	Masset Inlet, B.C.....	100
Thurston Harbour.....	Thurston Harbour, B.C.....	100
Port Alice.....	Quatsino Sound, B.C.....	100
Margaret Bay.....	Smith Inlet, B.C.....	100
Iroquois Falls.....	Iroquois Falls, Ont.....	20
Twin Falls.....	Twin Falls, Ont.....	20
Victoriaville.....	Victoriaville, Que.....	200
Quebec.....	Quebec City.....	200
Anyox.....	Anyox, B.C.....	100
Hamilton.....	Hamilton, Ont.....	50
Toronto.....	Toronto, Ont.....	50
Gouin Dam.....	Gouin Dam, Que.....	200
New Glasgow.....	New Glasgow, N.S.....	25
Bear Trap Camp.....	Bear Trap Camp, N.S.....	25
Vancouver.....	Vancouver, B.C.....	300
Niagara Falls.....	Niagara Falls, Ont.....	100
Twenty Mile Creek.....	Twenty Mile Creek, Ont.....	50
Port Credit.....	Port Credit, Ont.....	50
Toronto.....	Toronto, Ont.....	65
Burlington.....	Burlington, Ont.....	65
Anticosti Island.....	Anticosti Island.....	75
Toronto.....	Toronto, Ont.....	65
Cooksville.....	Cooksville, Ont.....	25
York.....	York, Ont.....	25
Guelph.....	Guelph, Ont.....	25
Preston.....	Preston, Ont.....	25
Kitchener.....	Kitchener, Ont.....	25
Stratford.....	Stratford, Ont.....	25
St. Mary's.....	St. Mary's, Ont.....	25
Brant.....	Brant, Ont.....	25
Woodstock.....	Woodstock, Ont.....	25
St. Thomas.....	St. Thomas, Ont.....	25
Chatham.....	Chatham, Ont.....	25
Walkerville.....	Walkerville, Ont.....	50
Sydney.....	Sydney, N.S.....	500
Montreal.....	Montreal, Que.....	Receiving only.

¹ Temporarily closed. The station at Pas is a land station.

68.—Canadian Government Steamers Equipped with the Radiotelegraph, fiscal year ended Mar. 31, 1924.

Names.	Range.	Names.	Range.
	Miles.		Miles.
Aberdeen.....	100	Aranmore.....	150
Acadia.....	200	Bellechasse.....	150
Arleux.....	100	Laurentian.....	150
Armentières.....	100	Malaspina.....	200
Arras.....	100	Margaret.....	200
Dollard.....	200	Montcalm.....	150
Druid.....	100	Newington.....	100
Estevan.....	200	Sheba.....	200
Givenchy.....	100	Stanley.....	150
Gulnare.....	100	Thiepval.....	100
Lady Grey.....	100	Lady Laurier.....	150
Arctic.....	1,000	Tyrian.....	150
Iurcheur (lightship).....	150	Sagamore.....	150
Mikula.....	250	Grib.....	125
Anticosti (lightship.).....	150	Ypres.....	100

69.—Business and Cost of Maintenance of Radiotelegraph Stations for the fiscal years ended Mar. 31, 1923 and 1924.

Stations.	1923.			1924.		
	Messages handled.	Words handled.	Cost of maintenance.	Messages handled.	Words handled.	Cost of maintenance.
			\$			\$
East Coast.....	127,278	2,423,156	146,819	142,251	2,523,369	134,441
Great Lakes.....	30,424	468,785	44,430	50,746	797,045	44,133
West Coast.....	154,030	2,574,757	76,599	179,467	3,364,136	84,083
Total.....	311,732	5,466,698	267,849	372,464	6,684,550	262,657

Radio Telephony.—Radio telephony—the wireless transmission of the human voice—is a later development of radio telegraphy. During the Great War, radio telephony was perfected for the use of warships and airplanes. In 1920 and 1921 its peace-time possibilities, were, for the first time, widely appreciated, and musical programmes were broadcasted by electrical companies as part of their campaign to sell private radio equipment. Radio telephony has become a very practicable means of relaying telephone messages to places where the population is too sparse to support a telephone system and to ships at sea. But radio telephony is not applicable to the regular business of telephone companies in urban districts, because only a limited number of messages can be transmitted simultaneously without interference.

Table 70 shows a summary classification of radio stations in Canada.

70.—Wireless and Radio Stations in Operation in Canada, March 31, 1924.

Kind of Stations.	Number.
Coast Stations (government-owned).....	31
Land Stations.....	1
Direction Finding Stations (government-owned).....	7
Ship Stations (government-owned).....	30
Ship Stations (Commercial).....	232
Limited Coast Stations.....	2
Public Commercial Stations.....	7
Private Commercial Stations.....	55
Private Commercial Broadcasting Stations.....	46
Experimental Stations.....	46
Amateur Experimental Stations.....	1,345
Amateur Broadcasting Stations.....	22
Private Receiving Stations.....	31,609
Radio Training Schools.....	14
Radio Beacon Stations.....	4
Life Saving Stations.....	5
Total.....	33,456

XI.—TELEPHONES.

Telephone development in Canada dates from the year 1880, when the Bell Telephone Co. was incorporated by Act of Parliament. Although at this time all patents and lines were owned by the Canadian Telephone Co., they were dependent on the Bell Co., to which they sold out in 1882. By 1883 the first submarine telephone cable had been laid between Windsor and Detroit, and during the year the Bell Co. operated in Canada 4,400 rental-earning telephones, 44 exchanges and 40 agencies, with 600 miles of long distance wire. It controlled development in all the provinces except British Columbia, where the greater part of the system has always been in the hands of the British Columbia Telephone Co., Ltd.

With rapid growth of private companies in the Maritime Provinces, the lines of the Bell Co. were disposed of in 1888 to the Maritime Telegraph and Telephone Co. in Nova Scotia and to the New Brunswick Telephone Co. in New Brunswick, an interest in these corporations being retained under the terms of sale. A development of a different kind is seen in the three Prairie Provinces, where well organized systems were sold to the governments of Manitoba and Alberta in 1908 and to Saskatchewan in 1909. The lines in Ontario and Quebec are still largely owned by the Bell Telephone Co.

Telephone Systems.—In all the provinces, besides the large telephone companies, are many smaller systems, both urban and rural, usually owned privately or co-operatively. The number of independent lines is particularly large in Saskatchewan. The steady growth in the use of telephones is shown in Table 71, particularly by the increase of 65,174 telephones in 1923 as compared with 1922. For each 100 of population, there were 11 telephones in use during 1923, over 43 p.c. of the total being in Ontario. In this respect Canada ranks second among the countries for which such data are available.

Government ownership of telephone lines has now had a 15-year's trial in the three Prairie Provinces. Financial statistics of their various departments show an earned surplus in Manitoba of \$32,274 for the year ending Nov. 30, 1922, a credit balance in Saskatchewan of \$821,502 for the year ending April 30, 1923, and net earnings in Alberta of \$424 for the calendar year 1922.

Telephone Statistics.—The following tables give figures illustrative of the use of telephones and the operations of telephone companies for 1923, the latest year available, and previous years. Certain statistics of radio telephony are also given on page 647.

71.—Progress of Telephones in Canada for the calendar years 1919-1923.

Items.	1919.	1920.	1921.	1922.	1923.
	\$	\$	\$	\$	\$
Capitalization.....	100,587,833	116,689,705	132,537,771	143,802,023	142,518,243
Cost of property, etc.....	125,017,222	144,560,969	158,678,229	167,332,932	179,002,152
Revenue.....	29,401,006	33,473,712	36,986,913	39,559,149	42,132,959
Operating expenses.....	20,081,436	28,044,401	30,080,035	29,966,181	32,390,370
Salaries and wages.....	15,774,586	17,294,405	19,000,422	17,305,759	18,182,429
	No.	No.	No.	No.	No.
Telephone companies.....	2,219	2,327	2,365	2,387	2,459
Wire mileage.....	1,956,830	2,105,101	2,268,271	2,396,805	2,574,083
Telephones.....	778,758	856,266	902,090	944,029	1,009,203
Employees.....	20,491	21,187	19,943	19,321	21,002
Persons per telephone.....	11.3	10.2	9.7	9.5	9.1
Persons per mile of wire.....	4.5	4.2	3.9	3.7	3.5

Statistics of the number of telephone companies reporting to the Dominion Bureau of Statistics are given in Tables 72 and 73. Special attention may be drawn to the growth of co-operative companies.

72.—Number of Telephone Companies in Canada, by Provinces, December 31, 1923.

Provinces.	Government.	Municipal.	Stock.	Co-operative.	Partnership.	Private.	Total.
	No.	No.	No.	No.	No.	No.	No.
Prince Edward Island	—	1	11	39	—	—	51
Nova Scotia.....	—	—	16	223	—	5	244
New Brunswick.....	—	—	19	14	—	4	37
Quebec.....	—	—	86	74	—	35	195
Ontario.....	2	114	271	155	1	70	613
Manitoba.....	1	8	3	20	—	5	37
Saskatchewan.....	1	2	27	1,185	—	—	1,215
Alberta.....	1	1	8	39	—	5	54
British Columbia.....	—	1	8	3	—	—	12
Yukon.....	—	—	1	—	—	—	1
Total.....	5	127	450	1,752	1	124	2,459

73.—Number of Telephone Companies in Canada, 1911-1923.¹

Years.	Government.	Municipal.	Stock.	Co-operative.	Partnership.	Private.	Total.
1911.....	3	25	308	101	18	82	537
1912.....	3	25	368	133	31	113	683
1913.....	4	52	543	262	63	161	1,075
1914.....	4	58	611	297	48	118	1,136
1915.....	4	62	584	601	28	117	1,396
1916.....	4	67	622	765	23	111	1,592
1917.....	5	73	645	841	17	114	1,695
1918.....	5	74	735	1,085	12	96	2,007
1919.....	5	89	666	1,346	18	95	2,219
1920.....	5	88	647	1,495	9	83	2,327
1921.....	5	103	614	1,544	7	92	2,365
1922.....	5	117	693	1,474	—	98	2,387
1923.....	5	127	450	1,752	1	124	2,459

¹ The years 1911-1918 are from July 1 to June 30. Figures for 1919, 1920, 1921, 1922 and 1923 are for the calendar years.

In the two tables following, figures are shown giving the number of telephones in use, the mileage of wire and the number of employees of telephone companies, by provinces, for the year 1923, and for the Dominion, from 1911 to 1923.

74.—Telephones in use, mileage of Wire and number of Employees, by Provinces, December 31, 1923.

Provinces.	Telephones in use.			Mileage of wire.	Number of employees.
	Central Energy.	Magneto.	Total.		
	No.	No.	No.	Miles.	No.
Prince Edward Island.....	1,867	3,478	5,345	5,732	88
Nova Scotia.....	23,108	14,443	37,551	69,505	796
New Brunswick.....	15,059	12,455	27,514	41,219	627
Quebec.....	137,795	42,982	180,777	416,000	5,157
Ontario.....	285,021	155,081	440,102	1,039,817	9,465
Manitoba.....	47,147	19,463	66,610	248,066	1,063
Saskatchewan.....	1	1	97,894	306,749	1,221
Alberta.....	33,667	33,435	67,102	247,655	758
British Columbia.....	75,007	11,171	86,178	198,740	1,823
Yukon.....	—	130	130	600	4
Total.....	—	—	1,009,203	2,574,083	21,002

¹ Not divided.

75.—Telephones in use, mileage of Wire and number of Employees, 1911-1923.¹

Years.	Telephones in use.			Mileage of wire.	Number of employees.
	Central Energy.	Magneto.	Total.		
	No.	No.	No.	Miles.	No.
1911.....	174,994	127,765	302,759	687,782	10,425
1912.....	212,732	158,152	370,884	859,572	12,783
1913.....	269,843	193,828	463,671	1,092,587	12,867
1914.....	310,166	210,978	521,144	1,343,090	16,799
1915.....	313,225	219,865	533,090	1,452,360	15,072
1916.....	323,109	225,312	548,421	1,600,564	15,247
1917.....	352,770	251,366	604,136	1,708,203	16,490
1918.....	384,687	277,643	662,330	1,848,466	17,336
1919.....	474,541	304,217	778,758	2,105,240	20,491
1920.....	524,593	331,673	856,266	2,105,101	21,187
1921.....	567,831	334,259	902,090	2,268,271	19,943
1922.....	601,801	342,228	944,029	2,396,805	19,321
1923.....	2	2	1,009,203	2,574,083	21,002

¹ See note to Table 73. ² Not available.

Financial statistics of Canadian telephone companies are given in Tables 76 and 77 below.

76.—Financial Statistics of Telephone Companies, by Provinces, for the calendar year 1923.

Provinces.	Capital stock.	Funded debt.	Cost of property and equipment.	Salaries and wages.	Gross revenue.	Operating expenses.	Net operating revenue.
	\$	\$	\$	\$	\$	\$	\$
Prince Edward Island.....	433,497	200,527	761,355	63,520	147,322	126,354	20,968
Nova Scotia.....	3,600,270	2,500,000	5,880,884	1,065,999	1,590,224	1,359,617	230,607
New Brunswick.....	2,909,842	39,884	3,250,349	444,598	1,148,389	916,279	232,101
Quebec ¹	41,817,516	18,015,525	81,078,752	4,248,422	23,656,403	16,364,632	7,291,771
Ontario.....	2,679,634	2,037,477	8,278,500	7,657,909	1,928,496	1,668,405	260,091
Manitoba.....	25,495	18,674,415	18,778,918	1,576,303	3,231,017	3,175,094	55,923
Saskatchewan.....	783,387	26,010,443	26,793,830	826,358 ¹	3,865,559	3,190,485	675,074
Alberta.....	62,079	25,478,368	21,547,119	1,155,879	2,994,007	3,255,855	261,848
British Columbia.....	5,089,955	2,349,758	12,438,581	1,134,971	3,553,517	2,321,285	1,232,232
Yukon.....	65,000	—	193,866	8,470	18,034	12,364	5,670
Total.....	57,366,675	95,306,347	179,002,152	18,182,429	42,132,959	32,390,370	10,266,285

¹ Provincial Government system only.² As the head office of the Bell Telephone Company is situated in Montreal, its very large business is necessarily credited to Quebec, though largely transacted outside of that province.**77.—Financial Statistics of Canadian Telephone Companies for the years 1912-1923.¹**

Years.	Capital stock.	Funded debt.	Cost of property and equipment.	Salaries and wages.	Gross revenue.	Operating expenses.	Net operating revenue.
	\$	\$	\$	\$	\$	\$	\$
1912.....	21,533,605	24,743,247	50,887,799	2,659,642	12,273,627	9,094,689	3,178,938
1913.....	26,590,501	33,256,503	69,214,971	6,839,309	14,897,278	11,175,689	3,721,589
1914.....	28,644,340	41,647,554	80,258,356	8,250,253	17,297,269	12,882,402	4,414,867
1915.....	28,947,322	45,337,869	83,792,583	8,357,029	17,601,673	12,836,715	6,764,958
1916.....	29,416,956	47,503,358	88,520,021	7,852,719	18,594,268	11,147,201	7,447,067
1917.....	29,476,367	49,645,335	94,469,534	8,882,593	20,122,282	12,095,426	8,026,856
1918.....	29,803,090	55,471,601	104,368,627	10,410,807	22,753,280	13,644,524	9,108,756
1919.....	35,227,233	65,360,600	125,017,222	15,774,586	29,401,006	20,681,436	9,319,570
1920.....	36,149,838	80,539,367	144,560,969	17,294,405	33,473,712	28,044,401	5,429,311
1921.....	42,194,426	90,343,345	153,678,229	19,000,422	36,986,913	30,080,035	6,906,878
1922.....	48,968,198	94,833,825	167,332,932	17,305,759	39,559,149	29,966,181	9,592,968
1923.....	57,366,675	95,306,347	179,002,152	18,182,429	42,132,959	32,390,370	10,266,285

¹ Figures for the years 1912-1918 are from July 1 to June 30; those for 1919-1923 are for the years Jan. 1 to Dec. 31.

XII.—THE POST OFFICE.

Historical.—A postal service was established between Montreal and Quebec as early as 1721, official messengers and other travellers making a practice of carrying letters for private persons. When Canada came under British rule, the Post Office was placed on a settled footing by Benjamin Franklin, then Deputy Postmaster-General for the American colonies, who visited Canada in 1763, opened post offices at Quebec, Montreal and Three Rivers, and also established courier communication between Montreal and New York. Since 1755 Halifax had had a post office and direct postal communication with Great Britain.

As a consequence of the American Revolution and the resulting isolation of Canada from Nova Scotia, the first exclusively Canadian postal service, a monthly courier route from Halifax to Quebec, was established in 1788, involving a seven weeks' trip and expenses of about £200, of which only one-third was met by postal charges. Up to 1804 the postal facilities of Upper Canada consisted of one regular trip by courier each winter with whatever mail might reach Montreal during the season of navigation. Charges were necessarily high, \$1.12 being paid on ordinary letters from London to Toronto *via* Halifax.

The first post office in Toronto was opened about 1800. By 1816 there were 19 offices in the two Canadas, and in 1827 this number had increased to 114. At this time the system consisted primarily of a trunk line of communication between Halifax, Quebec, Montreal, Toronto and Amherstburg, over which couriers travelled at varying intervals. Branching off this line were routes to Sorel, Sherbrooke, St. Johns, Hull, Hawkesbury, Perth and Richmond, with most deliveries made once or twice a week.

Hitherto the Post Office had been under the control of the Imperial Department, but considerable agitation resulted in the service being transferred on April 6, 1851, to the several provinces. Only enough mutual control was maintained to insure the continuance of Imperial and intercolonial relations. The provinces had complete jurisdiction over the establishment and maintenance of systems and rates.

At Confederation the provincial systems were transferred to the Dominion. The Post Office Act of 1867 established a service throughout Canada. The domestic rate on letters was reduced from 5 to 3 cents per half-ounce, and in 1870 the rates to the United States and Great Britain were reduced from 10 to 6 cents and from 12½ to 6 cents respectively per half-ounce. In 1875 a convention between Canada and the United States reduced postal rates between the countries to the domestic level. In 1878, on the admission of Canada to the Postal Union, letter postage to the countries of the Postal Union was reduced to 5 cents per half-ounce. After a conference in 1897, Imperial penny postage (2 cents per half-ounce) was established on Dec. 25, 1898, while the domestic rate was reduced from 3 to 2 cents per ounce. These rates were maintained until 1915, when a 1-cent war tax, still in force, was imposed on all 2-cent letters, on post cards and postal notes. Recently the rate to Great Britain has been increased to 4 cents per ounce and that to Postal Union countries has been raised to 10 cents per ounce.

The Post Office Department is administered by the Postmaster-General. Besides the several administrative branches within the Department, the Dominion is divided into 15 districts, each in charge of a Post Office Inspector. The Canadian system embraces a territory more extensive than that served by any other systems except those of the United States and Russia, the sparsity of population and the comparative lack of development making inevitable a peculiarly difficult and expensive service.

International Postal Conference.—An important epoch in the history of the Canadian Post Office began with the holding at Ottawa in December, 1922, of the first International Postal Conference between representatives of the United States and Canada. The development of postal reciprocity between the two countries dates from 1792, when the first postal arrangement between them was concluded. The years 1848, 1875, 1881 and 1888 mark the dates of later agreements regarding postal matters. The conference of 1922 dealt in detail with all important points in international postal relations and provided for increased facilities in the interchange of mail matter between the two countries.

Rural Mail Delivery.—A system of rural mail delivery was inaugurated in Canada on October 10, 1908, limited at that time to existing stage routes, persons residing on such routes being entitled to have mail boxes put up in which the mail carrier was to deposit mail matter and from which he was to collect mail matter and carry it to the post office. As a consequence of the public approval of this scheme, new regulations, taking effect on April 1, 1912, made all persons residing in rural districts along and contiguous to well-defined main thoroughfares of one mile and upwards eligible to receive their mail in this manner, while couriers of rural mail routes were also required to sell postage stamps and take applications for and accept money, money orders and postal notes. The result has been an increase in the number of rural routes from approximately 900 in 1912 to 3,777 in 1923, having 206,406 mail boxes as against approximately 25,000 in 1912. The establishment of these routes has been an important factor in the recent amelioration of the conditions of Canadian rural life.

Statistics.—Tables 78 to 80 show the number of post offices in operation in Canada in 1923, gross revenue in all offices collecting \$10,000 and upwards, and the revenue and expenditure of the department since 1890.

78.—Number of Post Offices in Operation in the several Provinces of Canada, March 31, 1923.

Provinces.	Post Offices.			
	In Operation Mar. 31, 1922.	Established during Year.	Closed during Year.	In Operation Mar. 31, 1923.
Prince Edward Island.....	133	—	—	133
Nova Scotia.....	1,834	22	20	1,836
New Brunswick.....	1,133	20	14	1,139
Quebec.....	2,301	52	28	2,325
Ontario.....	2,577	51	51	2,577
Manitoba.....	802	10	9	803
Saskatchewan.....	1,406	8	11	1,403
Alberta.....	1,188	25	19	1,194
British Columbia.....	846	16	13	849
Yukon Territory.....	21	1	2	20
Northwest Territories.....	6	3	—	9
Total.....	12,247	208	167	12,288

79.—Statistics of Gross Postal Revenue of Offices collecting \$10,000 and upwards, for the fiscal years ended Mar. 31, 1922 and 1923.

Name of Post Office.	1922.	1923.	Name of Post Office.	1922.	1923.
P. E. Island.			Ontario—con.		
Charlottetown.....	\$ 60,133	\$ 62,245	Bowmanville.....	\$ 13,273	\$ 14,524
Summerside.....	20,511	19,704	Bracebridge.....	13,008	13,557
Total for Province.....	150,820	152,464	Brampton.....	23,008	25,100
Nova Scotia.			Brantford.....	140,608	152,271
Amherst.....	41,550	42,632	Bridgeburg.....	20,685	20,499
Antigonish.....	13,373	13,923	Brockville.....	49,589	52,509
Bridgewater.....	14,520	16,144	Burlington.....	8,845	10,172
Dartmouth.....	13,570	13,668	Campbellford.....	10,732	11,124
Glace Bay.....	17,759	17,659	Carleton Place.....	16,647	19,382
Halifax.....	394,438	426,506	Chatham.....	67,662	71,035
Kentville.....	19,801	20,764	Cobalt.....	22,561	26,087
Lunenburg.....	11,495	11,836	Cobourg.....	22,950	25,085
New Glasgow.....	34,444	35,607	Cochrane.....	13,537	17,426
North Sydney.....	18,446	19,973	Collingwood.....	22,962	23,081
Pictou.....	13,990	13,662	Cornwall.....	31,373	33,521
Springhill.....	9,927	10,598	Dundas.....	15,103	16,552
Sydney.....	64,304	69,835	Dunnville.....	19,293	29,552
Sydney Mines.....	9,643	10,547	Fergus.....	12,720	13,646
Truro.....	51,041	51,908	Fort William.....	70,862	77,766
Windsor.....	19,151	18,478	Fort Frances.....	13,007	13,767
Wolfville.....	14,125	13,817	Galt.....	61,341	66,104
Yarmouth.....	26,741	26,862	Gananoque.....	16,808	18,092
Total for Province.....	1,277,076	1,343,000	Georgetown.....	11,108	12,348
New Brunswick.			Goderich.....	17,716	18,566
Bathurst.....	11,759	12,527	Grimsby.....	15,501	16,517
Campbellton.....	19,009	21,169	Guelph.....	100,210	108,127
Chatham.....	12,667	13,690	Haileybury.....	16,386	14,113
Edmundston.....	12,320	14,031	Hamilton.....	551,209	588,297
Fredericton.....	61,692	64,301	Hanover.....	13,727	15,646
Moncton.....	325,835	375,551	Harriston.....	10,142	10,529
Newcastle.....	13,098	13,296	Hespeler.....	11,720	12,840
St. John.....	271,149	295,789	Huntsville.....	11,818	12,613
St. Stephen.....	19,282	20,289	Ingersoll.....	22,702	24,575
Sackville.....	15,108	16,210	Iroquois Falls.....	10,228	10,717
Sussex.....	15,057	16,500	Kenora.....	17,831	20,974
Woodstock.....	18,935	20,259	Kincardine.....	12,675	12,882
Total for Province.....	1,110,385	1,213,039	Kingston.....	107,360	115,884
Quebec.			Kitchener.....	95,282	108,089
Chicoutimi.....	24,070	23,424	Leamington.....	15,759	19,012
Coaticook.....	11,336	11,458	Lindsay.....	32,663	34,452
Drummondville East.....	9,112	10,591	Listowel.....	13,362	14,372
Farnham.....	9,205	10,494	London.....	443,079	488,003
Granby.....	15,625	16,479	Meaford.....	10,672	11,946
Hull.....	28,952	28,181	Midland.....	20,221	21,680
Joliette.....	19,958	19,641	Milton West.....	9,596	10,960
La Tuque.....	12,138	11,677	Mount Forest.....	9,789	10,098
Magog.....	10,490	11,608	Napanee.....	19,815	20,527
Montreal.....	3,278,467	3,680,397	New Liskeard.....	12,946	15,412
Quebec.....	465,553	523,026	Newmarket.....	17,147	17,347
Richmond.....	10,625	11,449	Niagara Falls.....	92,940	96,019
Rimouski.....	12,694	14,357	North Bay.....	45,774	48,555
Ste. Agathe des Monts.....	10,102	10,412	Oakville.....	14,757	17,280
St. Hyacinthe.....	32,673	34,414	Orangeville.....	10,711	10,617
St. Johns.....	20,361	21,931	Orillia.....	40,588	44,990
Shawinigan Falls.....	20,469	21,313	Oshawa.....	54,555	69,314
Sherbrooke.....	103,592	111,969	Ottawa.....	560,596	598,777
Sorel.....	10,327	11,252	Owen Sound.....	47,782	52,614
Thetford Mines.....	12,652	13,849	Paris.....	18,468	20,986
Three Rivers.....	53,757	59,238	Parry Sound.....	15,036	15,035
Valleyfield.....	12,603	13,791	Pembroke.....	29,470	31,283
Victoriaville.....	14,536	15,755	Perth.....	26,218	26,867
Total for Province.....	5,530,513	6,114,013	Peterborough.....	101,245	109,890
Ontario.			Petrolia.....	14,272	14,499
Almonte.....	9,673	10,069	Pictou.....	16,411	17,310
Arnprior.....	14,925	15,901	Port Arthur.....	53,040	57,648
Aurora.....	11,840	17,773	Port Colborne.....	13,381	15,788
Aylmer West.....	13,915	16,234	Port Hope.....	20,843	20,853
Barrie.....	25,562	27,790	Prescott.....	13,143	13,711
Belleville.....	52,397	56,332	Preston.....	21,920	23,904
			Renfrew.....	25,059	25,669
			St. Catharines.....	85,720	92,710
			St. Mary's.....	18,227	19,584
			St. Thomas.....	61,196	66,835
			Sarnia.....	62,814	65,504
			Sault Ste. Marie.....	70,955	72,489
			Seaforth.....	10,344	10,876
			Simcoe.....	21,111	22,303

79.—Statistics of Gross Postal Revenue of Offices collecting \$10,000 and upwards for the fiscal years ended Mar. 31, 1922 and 1923—concluded.

Name of Post Office.	1922.	1923.	Name of Post Office.	1922.	1923.
Ontario—concluded.			Alberta.		
Smith's Falls.....	\$ 26,395	\$ 27,805	Banff.....	14,547	16,242
Stratford.....	59,281	62,973	Calgary.....	532,233	547,751
Stratford Station.....	11,702	11,162	Camrose.....	14,771	16,071
Strathroy.....	11,834	12,963	Drumheller.....	18,609	19,831
Sturgeon Falls.....	10,517	10,549	Edmonton.....	443,880	460,150
Sudbury.....	47,110	49,932	Hanna.....	10,232	9,451
Thorold.....	16,347	14,853	Lacombe.....	12,547	13,186
Tillsonburg.....	14,361	15,469	Lethbridge.....	68,227	72,945
Timmins.....	21,088	29,230	Macleod.....	10,191	10,365
Toronto.....	5,223,979	5,798,015	Medicine Hat.....	48,585	51,457
Trenton.....	18,900	20,483	Red Deer.....	19,975	19,310
Walkerton.....	11,629	12,178	Stettler.....	10,861	10,526
Wallaceburg.....	12,910	13,981	Vermilion.....	10,694	10,412
Waterloo.....	28,806	30,490	Vegreville.....	10,066	9,896
Welland.....	42,799	44,848	Wetaskiwin.....	15,586	15,009
Weston.....	17,617	18,249			
Whitby.....	11,798	13,184	Total for Province.....	1,996,163	2,042,463
Windsor.....	193,050	298,296	British Columbia.		
Wingham.....	11,802	12,630	Chilliwack.....	15,276	16,542
Woodstock.....	51,103	58,446	Cranbrook.....	18,034	19,823
Total for Province.....	11,847,296	12,947,126	Duncan's Station.....	15,168	16,906
Manitoba.			Fernie.....	17,658	18,810
Brandon.....	106,905	114,300	Kamloops.....	31,276	32,207
Dauphin.....	24,396	24,301	Kelowna.....	21,634	22,003
Minnedosa.....	9,875	10,276	Nanaimo.....	27,071	29,614
Neepawa.....	12,210	12,575	Nelson.....	41,165	43,236
Portage la Prairie.....	40,645	38,430	New Westminster.....	62,010	69,032
Virden.....	9,555	10,183	North Vancouver.....	15,353	15,918
Winnipeg.....	2,860,898	2,996,650	Penticton.....	19,966	20,500
Total for Province.....	3,594,511	3,767,130	Prince Rupert.....	34,515	33,137
Saskatchewan.			Revelstoke.....	12,245	13,505
Assiniboia.....	9,876	10,007	Trail.....	11,288	13,281
Battleford.....	10,057	10,076	Vancouver.....	960,131	1,085,421
Estevan.....	18,825	19,449	Vernon.....	32,872	32,295
Humboldt.....	12,677	13,050	Victoria.....	252,980	269,222
Lloydminster.....	10,204	10,501	Total for Province.....	2,100,657	2,300,811
Maple Creek.....	10,465	10,907	Yukon.		
Melfort.....	13,595	13,489	Total for Yukon.....	11,995	14,076
Melville.....	12,850	13,596	SUMMARY.		
Moose Jaw.....	132,998	138,765	P. E. Island.....	150,820	152,461
Moosomin.....	9,817	10,922	Nova Scotia.....	1,277,076	1,343,000
North Battleford.....	25,937	26,351	New Brunswick.....	1,110,385	1,213,039
Prince Albert.....	47,559	49,252	Quebec.....	5,530,513	6,114,013
Regina.....	629,304	707,091	Ontario.....	11,847,296	12,947,126
Saskatoon.....	250,698	262,719	Manitoba.....	3,594,511	3,767,130
Shaunavon.....	13,485	13,155	Saskatchewan.....	2,468,648	2,634,202
Swift Current.....	33,678	34,400	Alberta.....	1,996,163	2,042,463
Weyburn.....	30,648	31,691	British Columbia.....	2,100,657	2,300,811
Yorkton.....	35,659	37,500	Yukon.....	11,995	14,076
Total for Province.....	2,468,648	2,634,202	Total.....	30,088,064	32,528,321

80.—Revenue and Expenditure of the Post Office Department for the quinquennial years 1890-1910, and for the fiscal years ended Mar. 31, 1911-1923.

Fiscal Years.	Net revenue.	Expenditure.	Deficit.	Surplus.
	\$	\$	\$	\$
1890.....	2,357,389	3,074,470	717,081	-
1895.....	2,792,790	3,593,647	800,857	-
1900.....	3,183,984	3,645,646	461,662	-
1905.....	5,125,373	4,634,528	-	490,845
1910.....	7,958,547	7,215,337	-	743,210
1911.....	9,146,952	7,954,223	-	1,192,729
1912.....	10,482,255	9,172,035	-	1,310,220
1913.....	12,060,476	10,882,805	-	1,177,671
1914.....	12,956,216	12,822,058	-	134,158
1915.....	13,046,650	15,961,191	2,914,541	-

80.—Revenue and Expenditure of the Post Office Department for the quinquennial years 1890-1910, and for the fiscal years ended Mar. 31, 1911-1923—concluded.

Fiscal Years.	Net revenue.	Expendi- ture.	Deficit.	Surplus.
	\$	\$	\$	\$
1916.....	18,858,410	16,009,139	—	2,849,271
1917.....	20,902,384	16,300,579	—	4,601,805
1918.....	21,345,394	18,046,558	—	3,298,836
1919.....	21,602,713	19,273,584	—	2,329,129
1920.....	24,449,917	20,774,385	—	3,675,532
1921.....	26,331,119	24,661,262	—	1,669,857
1922.....	26,554,538	28,121,425	1,566,887	—
1923.....	29,262,233	27,794,502	—	1,467,731

NOTE.—For all other years since 1868, see Canada Year Book, 1911, p. 288.

Auxiliary Services.—The auxiliary postal services—the issuing of money orders (including postal notes) and the facilities offered by the Post Office savings banks—have expanded enormously since Confederation. In 1868, for example, there were 515 money order offices in operation, issuing orders to an amount of \$3,342,574. In 1923 the number of offices had increased to 5,337, while the value of orders issued was more than 40 times as large as in the earlier year. In the following tables, illustrating the use of money orders and postal notes, it will also be noticed that the large number of 11,098,222 money orders, representing a value of \$143,055,120, were issued during the year. The number of postal notes received was 5,984,239, while the value of those issued amounted to \$12,696,889. It may be added that postal notes are issued payable to bearer and are in general use for the transfer of small sums, while money orders, on the other hand, are payable to order at a designated post office. Statistical tables showing the operation of the Post Office savings banks and the Dominion Government savings banks are included in the section on Finance on page 809.

81.—Operation of the Money Order System in Canada, fiscal years ended June 30, 1901-1906, and Mar. 31, 1907-1923.

Fiscal Years.	Orders issued in Canada.	Value of orders issued in Canada.	Payable in		Value* of orders issued in other countries, payable in Canada.
			Canada.	Other countries.	
	No.	\$	\$	\$	\$
1901.....	1,151,024	17,956,258	14,324,289	3,631,969	2,592,845
1902.....	1,446,129	23,549,402	18,423,035	5,126,367	3,575,803
1903.....	1,668,705	26,868,202	20,761,078	6,107,124	4,604,528
1904.....	1,869,233	29,652,811	21,706,474	7,946,337	5,197,122
1905.....	1,924,130	32,349,476	23,410,485	8,938,991	5,602,257
1906.....	2,178,549	37,355,673	26,133,565	11,222,108	6,533,201
1907 (9 mos.).....	1,845,278	32,160,098	21,958,855	10,201,243	5,393,042
1908.....	2,990,691	49,974,007	31,836,629	18,137,378	7,933,361
1909.....	3,596,299	52,627,770	36,577,552	16,050,218	7,794,751
1910.....	4,178,752	60,967,162	41,595,205	19,371,957	8,048,467
1911.....	4,840,896	70,614,862	45,451,425	25,163,437	8,664,557
1912.....	5,777,757	84,065,891	52,568,433	31,497,458	8,712,667
1913.....	6,866,563	101,153,272	61,324,030	39,829,242	9,081,627
1914.....	7,227,964	109,500,670	66,113,221	43,387,449	9,807,313
1915.....	6,990,813	89,957,906	64,723,941	25,233,965	9,707,383
1916.....	7,171,375	94,469,871	75,781,582	18,688,289	9,868,137
1917.....	8,698,502	119,695,535	97,263,961	22,431,574	9,704,610
1918.....	9,919,665	142,959,167	116,764,491	26,194,676	9,385,627
1919.....	9,100,707	142,375,809	116,646,096	25,729,713	10,351,021
1920.....	9,947,018	159,224,937	135,201,816	24,023,121	10,050,361
1921.....	11,013,167	173,523,322	155,916,232	17,607,090	6,680,971
1922.....	10,031,198	139,914,186	124,316,726	15,597,460	5,515,069
1923.....	11,098,222	143,055,120	126,617,350	16,437,770	8,986,041

NOTE.—For 1868 to 1900, see Canada Year Book, 1911, p. 289.

Attention may be drawn to the discrepancy between the value of orders issued in Canada and payable in other countries and those issued elsewhere payable in Canada. The difference (about \$8,000,000 in 1923 and almost \$34,000,000 in 1914) represents to a large extent remittances made by immigrants and to travellers in foreign countries. It is an indication, at least, of the large amounts sent out from Canada, and is an essential figure in the computation of our balance of trade.

82.—Money Orders, by Provinces, fiscal years ended Mar. 31, 1919-1923.

Provinces.	1919.	1920.	1921.	1922.	1923.
	No.	No.	No.	No.	No.
Money order offices in—					
Canada	4,953	5,106	5,197	5,266	5,337
Prince Edward Island.....	50	53	62	63	64
Nova Scotia.....	333	342	344	360	366
New Brunswick.....	216	232	238	247	251
Quebec.....	1,069	1,093	1,111	1,126	1,134
Ontario.....	1,483	1,507	1,520	1,513	1,521
Manitoba.....	331	340	341	353	358
Saskatchewan.....	615	636	650	656	676
Alberta.....	443	476	490	508	520
British Columbia.....	408	422	433	436	442
Yukon Territory.....	5	5	5	4	5
Money orders issued in—					
Canada	9,100,707	9,947,018	11,013,167	10,031,198	11,098,222
Prince Edward Island.....	44,406	52,195	59,093	56,780	68,255
Nova Scotia.....	590,313	652,649	756,168	706,161	787,787
New Brunswick.....	279,021	342,868	428,648	390,186	433,345
Quebec.....	1,114,461	1,247,392	1,374,721	1,193,490	1,334,448
Ontario.....	2,757,205	3,086,535	3,658,173	3,073,193	3,354,982
Manitoba.....	744,702	779,379	815,550	763,640	831,315
Saskatchewan.....	1,692,030	1,762,494	1,804,563	1,804,767	2,056,272
Alberta.....	1,088,261	1,176,999	1,245,872	1,210,397	1,315,094
British Columbia.....	784,115	840,874	865,054	826,819	909,953
Yukon Territory.....	6,193	5,633	5,312	5,765	6,771
Receipts for money orders issued in—					
Canada	142,375,809	159,224,937	173,523,322	139,914,186	143,055,120
Prince Edward Island.....	711,259	837,384	890,038	770,936	886,337
Nova Scotia.....	9,376,962	10,326,440	11,241,946	8,996,905	9,366,417
New Brunswick.....	4,494,810	5,679,866	6,725,201	5,385,442	5,389,834
Quebec.....	16,750,568	19,135,849	20,982,946	16,106,847	16,654,927
Ontario.....	40,482,359	47,127,150	54,348,199	42,125,653	41,392,830
Manitoba.....	12,036,194	13,151,959	13,727,900	10,495,309	10,798,013
Saskatchewan.....	27,982,176	28,592,371	29,144,606	25,991,164	28,728,569
Alberta.....	16,338,633	18,532,956	20,173,523	17,416,395	16,956,761
British Columbia.....	14,045,759	15,696,988	16,146,385	12,849,834	12,716,153
Yukon Territory.....	157,089	143,974	142,578	135,701	165,279
Number of money orders paid in—					
Canada	8,033,665	9,104,136	9,864,184	9,680,463	10,111,820
Prince Edward Island.....	35,228	33,787	36,599	32,566	33,449
Nova Scotia.....	247,749	288,529	419,594	391,347	458,093
New Brunswick.....	142,906	207,579	704,072	645,812	740,939
Quebec.....	875,334	956,990	1,057,289	918,941	968,650
Ontario.....	3,238,259	3,775,383	3,551,679	3,209,381	3,605,808
Manitoba.....	1,786,195	1,992,408	1,790,933	2,055,452	2,290,874
Saskatchewan.....	977,016	1,062,526	929,641	1,013,055	1,118,384
Alberta.....	364,033	391,786	971,594	405,821	440,270
British Columbia.....	365,824	394,094	401,910	407,276	454,459
Yukon Territory.....	1,121	1,054	873	812	894
Amount of money orders paid in—					
Canada	127,219,233	146,495,784	162,992,196	139,593,935	135,274,776
Prince Edward Island.....	713,725	713,292	800,594	661,531	657,391
Nova Scotia.....	5,027,434	5,616,039	6,764,328	5,647,534	6,214,219
New Brunswick.....	2,937,008	3,955,777	10,415,372	8,263,419	8,826,768
Quebec.....	14,647,863	17,206,557	22,998,684	15,293,200	13,893,894
Ontario.....	44,029,412	53,250,399	52,562,211	42,445,288	44,452,751
Manitoba.....	29,017,441	32,092,104	31,633,328	27,765,545	29,520,452
Saskatchewan.....	15,228,040	16,668,206	18,303,344	14,457,674	15,130,063
Alberta.....	7,675,350	8,328,840	10,368,069	8,143,535	8,271,784
British Columbia.....	7,914,636	8,548,570	9,128,855	7,894,752	8,285,618
Yukon Territory.....	28,324	26,000	17,411	16,457	21,836

83.—Number and Total Values of Postal Notes, fiscal years ended Mar. 31, 1918-1923.

Values.	1918.	1919.	1920.	1921.	1922.	1923.
\$	No.	No.	No.	No.	No.	No.
0.20.....	235,579	191,362	166,078	144,084	158,108	173,210
0.25.....	327,138	306,642	275,214	227,789	281,679	340,713
0.30.....	229,152	222,590	204,429	175,564	190,364	208,251
0.46.....	244,294	228,783	229,954	240,085	225,044	210,129
0.50.....	433,142	417,145	409,967	389,935	425,943	465,787
0.60.....	233,977	220,299	220,006	226,510	213,320	201,455
0.70.....	133,578	124,850	131,031	146,247	124,558	108,925
0.75.....	234,081	225,925	188,561	173,389	190,413	206,833
0.80.....	198,667	188,117	189,654	196,695	175,443	171,749
0.90.....	202,228	185,790	191,881	208,922	186,400	179,231
1.00.....	923,891	891,539	851,118	864,275	837,437	1,006,036
1.50.....	426,230	420,503	433,896	467,034	393,725	386,663
2.00.....	643,685	725,992	603,156	619,726	578,353	607,115
2.50.....	276,419	266,918	277,871	277,796	240,269	239,930
3.00.....	424,815	423,243	421,983	452,632	419,969	425,173
4.00.....	284,362	276,919	278,762	317,232	293,936	290,896
5.00.....	453,310	472,832	479,251	499,089	477,460	492,080
10.00.....	303,245	277,764	277,306	300,787	266,953	270,063
Total notes received.....	No. 6,207,793	6,067,213	5,830,118	5,927,791	5,679,374	5,984,239
Total value, including postage stamps affixed.....	\$ 12,535,579	12,368,069	12,122,720	12,792,855	11,827,896	12,179,920
Commission received.....	\$ 134,516	131,913	127,964	132,393	124,957	130,545
Postal notes issued to postmasters.....	No. 6,339,230	6,094,255	5,901,171	5,902,035	5,580,475	6,143,400
Value of notes issued.....	\$ 12,948,457	12,548,384	12,304,949	13,026,166	11,598,881	12,696,889

84.—Issue of Postage Stamps, etc., fiscal years ended Mar. 31, 1922 and 1923.

Denominations.	Issue 1922.		Issue 1923.	
	Number.	Value.	Number.	Value.
	No.	\$	No.	\$
1.....	250,871,900	2,508,719	245,663,900	2,456,639
2.....	280,351,900	5,607,038	282,461,300	5,649,226
3.....	394,869,400	11,846,082	391,811,500	11,754,345
4.....	—	—	12,170,850	486,834
5.....	29,423,800	1,471,190	35,022,050	1,751,103
7.....	10,829,300	758,051	3,078,750	215,512
10.....	30,957,050	3,095,705	36,176,750	3,617,675
20.....	4,862,500	972,500	6,498,625	1,299,725
50.....	673,790	336,895	1,300,685	650,343
10 Special Delivery.....	410,975	41,097	159,995	15,959
20 ".....	—	—	163,975	32,795
1 cent P. Due.....	1,132,900	11,329	1,054,000	10,540
2 ".....	2,530,750	50,615	2,428,950	48,579
5 ".....	683,700	34,185	602,500	30,125
1 cent stamp books, 25c. each.....	443,663	110,916	305,685	76,421
2 " 25c. each.....	323,574	80,894	280,069	70,017
3 " 25c. each.....	218,159	54,540	856,750	214,188
Combination stamp books, 25c. each.....	—	—	333,461	83,365
1 cent rolls (sidewise).....	33,187	167,926	24,539	124,167
2 ".....	29,470	296,468	30,607	307,907
3 ".....	45,461	684,643	47,255	711,660
1 cent rolls (endwise).....	60	304	2	10
2 ".....	32	322	101	1,020
1 " \$5.10 each.....	501	2,555	—	—
2 " \$10.10 each.....	455	4,595	—	—
3 " \$15.10 each.....	333	5,028	—	—
1 cent post bands at \$1.20 per 100.....	1,149,400	13,793	1,942,600	23,311
1 cent post cards.....	13,542,600	135,426	14,981,400	149,814
2 cent post cards.....	12,004,400	240,088	11,779,500	235,590
1 cent advertising cards, 16 on sheet.....	598,000	5,980	332,000	3,320
2 " ".....	452,000	9,040	700,000	14,000
1 cent advertising cards, 8 on sheet.....	782,000	7,820	818,000	8,180
2 " ".....	2,219,000	44,380	2,608,000	52,160
1 cent advertising cards, single.....	1,102,500	11,025	489,500	4,895
2 " ".....	102,400	2,048	124,700	2,494
6 cent post cards for Postal Union countries.....	59,150	3,549	2,850	171
2 cent reply post cards.....	230,100	4,602	259,000	5,180
1 cent special wrappers.....	873,400	8,734	799,400	7,994
6 cent reply coupons.....	17,490	1,049	24,515	1,471
1 cent No. 7 stamped envelopes, \$1.30 per 100.....	1,692,000	21,996	1,431,250	18,606
2 cent No. 7 stamped envelopes, \$2.30 per 100.....	1,631,550	37,526	1,329,700	30,683
3 cent No. 7 stamped envelopes, \$3.30 per 100.....	2,689,700	88,760	2,432,800	80,283
1 cent No. 10 stamped envelopes, \$1.40 per 100.....	—	—	130,400	1,826
2 cent No. 10 stamped envelopes, \$2.40 per 100.....	—	—	114,300	2,743
3 cent No. 10 stamped envelopes, \$3.40 per 100.....	—	—	242,750	8,254
Total.....	1,047,838,550	28,777,413	1,061,014,564	30,259,030

Subsidies, etc.—The conveyance of mail by land and water entailed a total expenditure during 1923 of \$14,465,425. Land transportation (largely that by rural delivery) cost \$6,187,422; railway carriage cost \$7,477,483; while that by steamship amounted to \$558,394. These amounts were paid solely for services rendered as carriers. In addition, however, considerable mail is carried, on both the Atlantic and Pacific coasts, by steamships and steamship lines which are especially subsidized by the government. Table 85, showing amounts so paid in 1921, 1922 and 1923, is appended.

85.—Mail Subsidies and Steamship Subventions, fiscal years ended Mar. 31, 1921-1923

Service.	1921.	1922.	1923.
	\$	\$	\$
Canada and the West Indies or South America, or both.....	327,564	340,667	340,667
Canada and South Africa.....	146,000	133,833	121,667
Canada and Australia or New Zealand, or both, on Pacific Ocean..	124,642	127,162	119,633
Canada (Atlantic) and Australia and New Zealand.....	140,000	—	—
Canada, China and Japan.....	—	88,229	—
Canada and Newfoundland.....	20,295	30,513	26,923
Ferry service between Campment, l'Ours island and mainland of Georgian bay.....	3,000	2,000	1,000
St. John and Digby.....	9,584	9,648	14,520
St. John, Digby, Annapolis and Granville.....	2,000	2,000	2,000
St. John, N.B., and Minas Basin and Margaretsville, N.S.....	3,750	5,724	7,786
St. John, Westport and Yarmouth.....	10,000	10,000	10,000
St. John and Bridgetown.....	2,000	1,500	1,500
Halifax, La Have, and La Have river ports.....	3,731	4,961	5,827
Halifax and Newfoundland.....	5,000	5,000	5,000
Halifax, Canso and Guysboro.....	6,596	6,798	9,000
Halifax and Epry bay and ports in C. Breton.....	3,846	5,885	6,000
Halifax and West Coast of C.B.....	4,000	6,000	6,000
Halifax, south Cape Breton and Bras d'Or lake ports.....	6,000	6,000	6,000
Pictou, Souris and the Magdalen islands.....	—	24,000	24,000
Grand Manan and mainland.....	15,000	15,000	15,000
Miscou and Shippegan islands and mainland.....	—	—	3,300
Quebec, Montreal and Paspébiac.....	—	29,000	30,000
Quebec, Natashquan and Harrington.....	—	50,000	85,000
Quebec and ports on the shores of the gulf of St. Lawrence and between ports in P.E. Island, Nova Scotia, Newfoundland and Magdalen islands.....	68,906	—	—
Ste. Catherine's Bay and Tadoussac.....	—	—	1,500
Pictou and Montague, Murray Harbour, etc., and Georgetown.....	6,000	6,000	3,360
Pictou and New Glasgow and Antigonish County ports and Mulgrave.....	1,500	1,397	1,500
Pt. Mulgrave and Guysboro.....	6,560	6,918	9,395
Pt. Mulgrave, St. Peter's, etc.....	6,208	6,500	8,000
Pt. Mulgrave and Canso.....	11,500	13,370	13,500
Pictou, Mulgrave and Cheticamp.....	7,500	7,500	11,000
Petit de Grat and Mulgrave I.C.R. terminus.....	8,062	9,916	9,968
Baddeck and Iona.....	6,825	8,000	9,000
Sydney and Whycomagh.....	4,000	4,000	4,825
Sydney to Bras d'Or lake ports and ports on east and west coasts of C.B.....	14,000	14,000	14,000
Sydney and bay St. Lawrence ports.....	9,000	9,000	9,000
Charlottetown, Pictou and New Glasgow.....	—	2,000	7,939
Victoria, Vancouver and Skagway.....	23,594	24,219	25,000
Charlottetown, Victoria and Holliday's Wharf.....	2,500	3,500	4,000
Victoria and Vancouver island (west coast).....	15,000	15,000	15,000
Victoria and San Francisco.....	2,740	2,135	2,827
Newcastle, Neguac and Escuminac, Miramichi river and bay.....	3,000	3,939	5,000
Pelée island and mainland.....	8,000	8,000	11,000
Prince Rupert, B.C., and Queen Charlotte islands.....	21,000	21,000	21,000
Vancouver and ports on Howe sound.....	3,202	3,066	3,358
St. John and St. Andrews, N.B.....	4,000	4,000	4,000
St. John, Bear River and way ports.....	—	—	2,000
St. John and Wedgeport, N.S.....	—	—	5,000
Vancouver and northern ports of B.C.....	24,800	24,800	24,800
Expenses in connection with the supervision of subsidized steamship services.....	3,604	3,716	3,890
Total subsidies and subventions.....	1,094,509	1,105,896	1,070,684

NOTE.—The figures in the above table are taken from the "Canada Public Accounts," as issued by the Finance Department; they represent the amounts paid in connection with contracts made under statutory authority by the Department of Trade and Commerce for trade services, including the conveyance of mails.

VIII.—LABOUR, WAGES AND PRICES.

I.—LABOUR.

1.—Occupations of the People.

The occupations of the people of a country are at any given time mainly determined by its natural resources and the stage which has been reached in their development. The outstanding characteristics of Canada are its enormous extent, its immense natural resources and the comparatively slight development of these, only the southern portions of the country being as yet at all exploited. The developed areas fall into four economic units with quite distinct physical characteristics: first, the Maritime Provinces, where lands, forests, mines and fisheries are the chief natural resources; secondly, Ontario and Quebec, with lands, forests, mines and abundant water-power for manufacturing purposes; thirdly, the Prairie Provinces, where the land is the chief natural resource except in Alberta, which contains immense coal deposits; lastly, British Columbia, with fisheries, forests and mines, where agriculture plays a comparatively minor part. Though, when the country as a whole is considered, the immense fertile areas of arable land must be considered as its chief natural resource, in different parts of its vast expanse other resources predominate, and give the key to the chief occupations of the people.

In Canada, as in other new countries, the labouring population (using the term in its widest sense) bears a larger proportion to the total than is the case in older civilizations where there exists more realized wealth.

In addition to our native-born workers, great numbers of young males and smaller numbers of females, who have nothing to sell but their personal services, immigrate from older countries to Canada to find here a better market for their labour. Thus both the sex distribution and the age distribution of the population of Canada is rendered somewhat abnormal, an unusually large percentage of that population being of working age and of the male sex—that is, of the sex which is most generally gainfully employed.

These statements may be illustrated from the Canadian census of 1911. (See Table 1). In that year out of a total population 10 years old and over of 5,514,388 in the nine provinces, 2,723,634 were returned as gainfully employed, being 49·39 p.c. of such population, or 37·93 p.c. of 7,179,650, the total ascertained population of the nine provinces. Thus, three out of every eight persons in the Dominion were gainfully employed, or four out of every eight persons 10 years old and upwards.

Male Labour.—Considering the male population of 10 years old and upwards, it was found at the census of 1911 that no less than 79·54 p.c., or nearly four-fifths, were gainfully employed. Further, if we take out those under 15 as being more properly at school training for the future than gainfully employed in the present, and those over 65 as having earned the right to rest, we find that of the total male population between 15 and 65 no less than 92·73 p.c. was gainfully employed, a percentage which is increased to 96·28 p.c., if we consider only those in the main productive 40-year period between 25 and 64 years old inclusive. Thus, Canada is shown by its statistics to be emphatically, in so far as the males are concerned, a worker's country.

1.—Persons engaged in Gainful Occupations in Canada, by Ages, 1911.

Age periods.	Males 10 years of age and over.			Females 10 years of age and over.		
	Total number.	Engaged in gainful occupations.		Total number.	Engaged in gainful occupations.	
		Number.	Per cent of total.		Number.	Per cent of total.
10 to 14 years.....	353,876	17,376	4.91	344,500	7,777	2.26
15 to 24 years.....	735,071	620,972	84.48	647,874	179,992	27.78
25 to 64 years.....	1,682,522	1,619,885	96.28	1,384,228	168,034	12.14
65 years and over.....	194,176	100,580	51.80	172,141	9,018	5.24
Total 10 years and over.....	2,965,645	2,358,813	79.54	2,548,743	364,821	14.31

Female Labour.—The growth of the employment of females in gainful occupations between 1891 and 1911 is shown in Table 2. The figures found there may be supplemented by the information that in 1891, 11.07 p.c., in 1901, 12.01 p.c., in 1911, 14.31 p.c. of the female population 10 years old and over were gainfully employed—an increase from one-ninth to one-seventh of the female population of these ages during the 20-year period—a rate of increase which, in view of the labour conditions of the war and reconstruction period, will probably be found to have been maintained in the last decade.

It is significant that among females the age period during which there is the maximum of gainful employment is shown by the census to be that from 15 to 24 years inclusive. Of the female population of these ages, 27.78 p.c. were in 1911 gainfully employed, a percentage which fell to 12.14 p.c. for the period 25 to 64 years inclusive. As every employer of female labour knows, the decline is due to the absorption of female labour by marriage and home duties.

2.—Number of Males and Females 10 years of Age and over engaged in Gainful Occupations, by Provinces, 1881-1911.

Provinces.	1881. ¹	1891.		1901.		1911.	
	Male and Female.	Male.	Female.	Male.	Female.	Male.	Female.
	No.	No.	No.	No.	No.	No.	No.
Prince Edward Island.....	34,094	31,673	4,030	30,113	3,494	27,956	3,950
Nova Scotia.....	141,526	134,859	22,595	137,566	18,448	148,991	24,370
New Brunswick.....	105,289	94,261	13,456	98,058	13,807	103,275	16,491
Quebec.....	425,947	397,438	53,066	434,720	77,245	552,140	101,101
Ontario.....	625,501	535,765	94,460	645,322	108,625	836,135	154,878
Manitoba.....	23,162	50,669	4,315	77,418	8,575	155,900	22,206
Saskatchewan.....	3,993	20,759	994	45,145	2,993	195,247	13,275
Alberta.....						149,687	11,923
British Columbia.....	17,983	44,955	3,074	76,541	4,762	189,482	16,627
Canada.....	1,377,585	1,410,379	195,990	1,544,883	237,949	2,358,813	364,821

¹ Workers were not classified by sex in 1881.

Distribution of Labour Force by Industries.—The distribution of the Canadian labour force by industries at the censuses from 1881 to 1911 is given by numbers and percentages employed in Table 3. The most notable features of this table are the great absolute increase of 52.7 p.c. between 1901 and 1911 in the gainfully employed population, the comparative decline of the agriculturists (in spite of the large absolute increase in their numbers) from 48.1 p.c. of the occupied popu-

lation in 1881 to 34.3 p.c. in 1911, the increase of manufacturing workers from 11.7 to 18.0 p.c., of traders from 5.7 to 10.4 p.c. and of transportation workers from 2.9 to 8.0 p.c. of the occupied population in the 30-year period. It should, however, be borne in mind that under present day conditions of specialization in industry many of those employed in trade, transportation and manufactures are doing work which formerly was performed by agriculturists and other primary producers for themselves.

3.—Numbers and Percentage Distribution by Industries of Persons engaged in Gainful Occupations, 1881-1911.

NUMBERS IN EACH INDUSTRY.

Industries.	Workers engaged.			
	1881.	1891.	1901.	1911.
	No.	No.	No.	No.
Agriculture.....	662,266	735,207	716,860	933,735
Building trades.....	230,873	185,599	213,307	246,201
Domestic and personal service.....	90,085	139,929	163,670	214,012
Civil and municipal government.....	7,938	18,267	17,306	76,604
Fishing and hunting.....	28,500	30,045	27,225	34,812
Forestry.....	8,116	12,812	16,764	42,914
Manufactures.....	161,535	227,080	274,175	491,342
Mining.....	7,160	16,127	28,650	62,767
Miscellaneous.....	13,005	—	490	—
Professional.....	48,461	62,623	83,219	120,616
Trade and merchandising.....	78,905	109,632	160,410	283,087
Transportation.....	40,741	69,048	80,756	217,544
Total Workers.....	1,377,585	1,606,369	1,782,832	2,723,634

PERCENTAGES IN EACH INDUSTRY.

Industries.	Workers Engaged.			
	1881.	1891.	1901.	1911.
	p.c.	p.c.	p.c.	p.c.
Agriculture.....	48.1	45.8	40.2	34.3
Building trades.....	16.8	11.6	12.0	9.0
Domestic and personal service.....	6.5	8.7	9.3	7.8
Civil and municipal government.....	0.6	1.1	1.0	2.8
Fishing and hunting.....	2.1	1.9	1.5	1.3
Forestry.....	0.6	0.8	0.9	1.6
Manufactures.....	11.7	14.1	15.4	18.0
Mining.....	0.5	1.0	1.6	2.3
Miscellaneous.....	1.0	—	—	—
Professional.....	3.5	3.9	4.6	4.5
Trade and merchandising.....	5.7	6.8	9.0	10.4
Transportation.....	2.9	4.3	4.5	8.0
Total Workers.....	100.0	100.0	100.0	100.0

Distribution of Labour Force by Provinces.—The extremely varied character of the occupations of the Canadian people, as conditioned by the various utilized natural resources of our immense territory, may be illustrated by reference to Table 4, which shows that in 1911, out of every 1,000 gainfully employed males, the number employed in agriculture varied from 127 in British Columbia to 673 in Saskatchewan and 684 in Prince Edward Island. Only 1 out of every 1,000 gainfully employed males was employed in mining in Prince Edward Island and 3 in Saskatchewan, as compared with 82 in British Columbia and 115 in Nova Scotia. Only 2 out of every 1,000 were employed in forestry in Saskatchewan, Manitoba and Prince Edward Island, as compared with 62 in British Columbia. In fishing and hunting, the variation was from 3 per 1,000 in Manitoba to 98 per 1,000 in

Nova Scotia. The males gainfully employed in manufacturing industries varied from 35 per 1,000 of the occupied population in Saskatchewan to 220 per 1,000 in Ontario. From this widely differing occupational distribution of the population in different parts of the country arise many of the divergencies of interest which are reflected in Canadian social and political life.

The industrial distribution of female labour is considerably more uniform than is the case with male labour, though even here there are great variations. In the largest class, those employed in domestic and personal service vary from 338 per 1,000 in Ontario to 536 in Saskatchewan, while in manufactures they vary from 57 in Saskatchewan to 335 in Quebec. Comparing the sexes, we find an enormously larger percentage of the gainfully employed women than of the gainfully employed men occupied in professional pursuits. Out of the 57,835 women returned as employed in professional pursuits in 1911, no fewer than 34,063 were teachers.

4.—Percentage Distribution by Sexes of the Persons engaged in Gainful Occupations, by Industries and Provinces, 1911.

Occupations.	MALE.								
	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.
All Industries.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture.....	68.4	31.7	43.4	36.5	36.0	44.3	67.3	53.0	12.7
Building trades.....	6.2	8.4	11.4	12.3	10.0	11.9	7.3	8.1	12.7
Domestic and personal service.....	1.1	2.0	2.3	3.1	3.1	3.6	2.4	3.5	5.8
Civil and municipal government.....	0.9	3.0	1.9	3.1	3.0	3.1	2.0	2.8	5.6
Fishing and hunting.....	4.8	9.8	2.8	0.8	0.4	0.3	0.9	0.6	2.4
Forestry.....	0.2	2.1	4.3	2.0	1.3	0.2	0.2	0.5	6.2
Manufactures.....	6.5	14.5	15.7	19.6	22.0	9.5	3.5	5.7	16.7
Mining.....	0.1	11.5	0.8	1.0	2.0	0.6	0.3	3.5	8.2
Professional.....	2.2	2.0	2.1	2.9	2.7	3.1	1.9	2.4	3.4
Trade and merchandising.....	5.6	7.5	7.8	11.2	10.8	13.0	7.0	8.5	10.9
Transportation.....	4.0	7.5	7.5	7.5	8.7	10.4	7.2	11.4	15.4

Occupations.	FEMALE.								
	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.
All Industries.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture.....	14.7	6.3	5.5	3.0	3.7	4.1	12.1	10.4	2.4
Building trades.....	0.1	—	0.1	—	0.1	0.1	—	0.1	0.1
Domestic and personal service.....	39.5	46.0	40.3	37.1	33.8	44.9	53.6	46.0	42.0
Civil and municipal government.....	0.7	0.9	1.0	0.6	1.4	0.9	1.8	1.9	1.1
Fishing and hunting.....	0.4	0.1	—	—	0.1	—	0.2	—	0.4
Forestry.....	—	—	—	—	—	—	—	—	—
Manufactures.....	18.9	18.6	23.8	33.5	30.7	12.7	5.7	8.7	19.6
Mining.....	—	0.1	—	—	—	—	—	—	0.1
Professional.....	16.6	16.6	18.1	15.2	14.5	19.4	18.0	20.7	19.5
Trade and merchandising.....	8.6	10.0	10.0	9.0	13.8	14.0	7.4	10.4	12.2
Transportation.....	0.5	1.4	1.2	1.6	1.9	3.9	1.2	1.8	2.6

Distribution of Labour Force by Nativity.—While at the census of 1911 those born outside of Canada constituted approximately only 22 p.c. of the total population, these 22 p.c., because they contained a large proportion of young, strong males, contributed no less than 31.91 p.c. of those engaged in gainful occu-

pations. As is shown in Table 5, they constituted even a larger proportion of those engaged in domestic and personal service, in civil and municipal government, in mining and transportation, while they fell short of reaching their general proportion to the occupied population in agriculture, forestry, fishing and hunting—that is, in all the primary industries except mining.

5.—Numbers and Percentage Distribution by Nativity, Sex and Industries, of Persons engaged in Gainful Occupations, 1911.

Occupations.	Total Workers.		Male Workers.		Female Workers.	
	Male.	Female.	Born in Canada.	Born outside of Canada.	Born in Canada.	Born outside of Canada.
	No.	No.	No.	No.	No.	No.
Agriculture.....	917,848	15,887	667,207	250,641	11,954	3,933
Building trades.....	245,990	211	157,274	88,716	176	35
Domestic and personal service.....	75,133	138,879	38,597	36,536	90,904	47,975
Civil and municipal government.....	72,531	4,073	40,356	32,175	3,522	551
Fishing and hunting.....	34,547	265	31,601	2,946	258	7
Forestry.....	42,901	13	31,403	11,498	8	5
Manufactures.....	392,781	98,561	253,882	138,899	81,240	17,321
Mining.....	62,706	61	29,890	32,816	51	10
Professional.....	62,781	57,835	43,811	18,970	49,862	7,973
Trade and merchandising.....	240,903	42,184	167,289	73,614	34,471	7,713
Transportation.....	210,692	6,852	115,143	95,549	5,539	1,313
All Occupations.....	2,358,813	364,821	1,576,453	782,360	277,985	86,836

PERCENTAGES.

Occupations.	Total Workers.		Male Workers.		Female Workers.	
	Male.	Female.	Born in Canada.	Born outside of Canada.	Born in Canada.	Born outside of Canada.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Agriculture.....	98.30	1.70	72.69	27.31	75.24	24.76
Building trades.....	99.91	0.09	63.94	36.06	83.41	16.59
Domestic and personal service.....	35.10	64.89	51.37	48.63	65.45	34.55
Civil and municipal government.....	94.68	5.32	55.64	44.36	86.47	13.53
Fishing and hunting.....	99.24	0.76	91.47	8.53	97.35	2.65
Forestry.....	99.97	0.03	73.20	26.80	61.54	38.46
Manufactures.....	79.94	20.06	64.64	35.36	82.43	17.57
Mining.....	99.90	0.09	47.67	52.33	83.60	16.40
Professional.....	52.05	47.95	69.78	30.22	86.21	13.79
Trade and merchandising.....	85.09	14.91	69.44	30.56	81.72	18.28
Transportation.....	96.85	3.15	54.65	45.35	80.84	19.16
All Occupations.....	86.61	13.39	66.83	33.17	76.20	23.80

2.—Dominion Department of Labour.

The Department of Labour of the Dominion Government was established in 1900 under the authority of the Conciliation Act, 1900 (63-64 Vict., c. 24). Its chief duties originally comprised the administration of certain provisions of this statute designed to aid in the prevention and settlement of labour disputes, the administration of the Government's fair wage policy for the protection of workmen employed on the Dominion Government contracts and on works aided by grant of public funds, the collection and classification of statistical and other information relative to conditions of labour and the publication of a monthly periodical known as the "Labour Gazette." From 1900 to 1909, the Department was administered by the Postmaster-General, who was also Minister of Labour. It was constituted a separate Department under the Labour Department Act, 1909 (8-9 Edw. VII, c. 22).

The work of the Department was greatly increased in 1907 by the passage of the Industrial Disputes Investigation Act, 1907 (6-7 Edw. VII, c. 20). The Department is also charged with the administration of an Act passed in 1918 known as the Employment Offices Co-ordination Act (8-9 Geo. V, c. 21), the Technical Education Act, enacted in 1919 (9-10 Geo. V, c. 73), and the Combines Investigation Act, 1923. The scope of the Department has increased in other directions, especially in the investigation of questions relating to the cost of living.

Industrial Disputes Investigation Act.¹—The Industrial Disputes Investigation Act, 1907 (6-7 Edw. VII, c. 20), has attracted considerable favourable attention from legislators and publicists throughout the world. It distinctly forbids strikes or lockouts in industrial disputes affecting mines and public utilities, until the matters in dispute have been dealt with by a board of conciliation and investigation consisting of three members, two appointed by the Minister of Labour on the recommendation of the respective parties to the dispute, the third on the recommendation of the first two, or if they fail to agree, by the Minister himself. After their report has been made, either of the parties to the dispute may reject it and declare a strike or lockout, a course adopted, however, only in a small percentage of cases. The machinery of the Act may be extended to other industries with the consent of the parties concerned.

A review of the proceedings under the Industrial Disputes Investigation Act from its enactment in March, 1907, to March 31, 1924, shows that, in the 17 years, 619 applications were received for the establishment of boards of conciliation and investigation, as a result of which 441 boards were established. In all but 37 cases strikes (or lockouts) were averted or ended. In the fiscal year ended March 31, 1924, 28 applications for the establishment of boards of conciliation and investigation were received and 13 boards were established. Strikes (or lockouts) were averted in all cases.

Fair Wages Branch.—The Fair Wages Branch of the Department of Labour is charged with the preparation of schedules of minimum wage rates, which are inserted in Dominion Government contracts, and must be adhered to by contractors in the execution of such works. The number of fair wage schedules prepared, from the adoption of the Fair Wages Resolution in 1900 up to the end of the fiscal year 1923-24, was 4,073. The number of fair wage schedules and clauses furnished during the year 1923 was 70.

Fair wage conditions are also inserted in contracts for the manufacture of certain classes of government supplies and in contracts for all railway construction to which the Dominion Government has granted financial aid, either by way of subsidy or guarantee.

The Department of Labour is also frequently consulted by other departments of the Government regarding the wage rates to be observed in connection with work undertaken on the day labour plan.

An Order in Council of June 7, 1922, provided more effective measures to secure the observance of the fair wages policy of the Government of Canada.

Labour Gazette.—A monthly publication, known as the Labour Gazette, has been issued by the Department of Labour since the establishment of the Department in 1900. It contains a monthly review of the industrial situation in Canada and of the state of employment, including reports of the operations of the Employment Service of Canada in the various provinces, also information relative to labour

¹ See page 241 of Labour Gazette for February, 1925 for text of judgment of Judicial Committee of the Privy Council in regard to the validity of this statute.

legislation, wages, rates and hours of labour, wholesale and retail prices of staple commodities in Canada and other countries, labour disputes (including the proceedings under the Industrial Disputes Investigation Act), industrial accidents, legal decisions affecting labour, industrial training and technical education and other matters of general or current industrial interest. The Labour Gazette is widely distributed throughout Canada, and the statistical and other information contained therein is constantly used in connection with wages and other relations between employers and workers. A subscription charge of 20c. per annum is made for this publication.

Labour Legislation.—Much attention is devoted to labour legislation. Information as to new laws enacted by the Dominion and the Provinces is kept up to date, while notes or articles regarding their provisions are published in the Labour Gazette. Since 1917, the Department has published annual reports containing the text of Canadian labour laws enacted during the year, together with an introduction summarizing this legislation under subject headings. These reports are based on a consolidation of Dominion and Provincial labour legislation as existing at the end of 1915, which was made from the most recent revised statutes and the subsequent annual volumes of statutes up to 1915, and which formed the Department's report on labour legislation for 1915. Reports on the labour laws enacted in the four subsequent years were published in regular order. The report for 1920 is similar to that for 1915, being a consolidation of Canadian labour legislation as existing at the end of 1920. Reports supplementary to the 1920 volume were published for the calendar years 1921, 1922 and 1923.

The advantage of uniformity in the laws relating to the welfare of persons engaged in industrial work in the several provinces was pointed out in 1919 by the Royal Commission on Industrial Relations. This view was supported by a resolution of the National Industrial Conference, held in September, 1919. A commission was established in 1920, composed of representatives of the Dominion and Provincial Governments and of employers and workers respectively, to consider the subject. This commission met in Ottawa between April 26 and May 1, 1920, and formulated recommendations looking to greater uniformity in the provincial laws relative to workmen's compensation, factory control, mining, and minimum wages for women and girls.

Joint Industrial Councils.—One section of the report of the Royal Commission of 1919 on Industrial Relations, dealt with shop committees and industrial councils. The Commissioners strongly urged the adoption in Canada of the principles underlying the Whitley Councils and other kindred systems. The subject was also discussed at the National Industrial Conference of 1919. The Committee to which the matter was referred made a unanimous report, urging the necessity for greater co-operation between employer and employee and stating their belief that this end could be furthered by the establishment of joint industrial councils. The Committee did not consider it wise to recommend any set plan for such councils, but it recommended the establishment by the Dominion Department of Labour of a bureau to gather and furnish data for employers and employees, in order to render fullest assistance whenever it is desired to establish such councils.

It was not found necessary to found a special bureau for this purpose, but the Department, entering heartily into the spirit of the resolution, has continued and extended its study of joint industrial councils and kindred systems. Information respecting such organizations, furnished by employers throughout Canada, has been assembled and published in the form of a special bulletin, which also contains facts regarding similar systems in other countries.

3.—Canada and the International Labour Organization.¹

The International Labour Organization was set up in accordance with Part XIII of the Treaty of Versailles. The general object of the Organization is given in the preamble to that document:—

“Whereas the League of Nations has for its object the establishment of universal peace, and such a peace can be established only if it is based upon social justice;

“And whereas conditions of labour exist involving such injustice, hardship and privation to large numbers of people as to produce unrest so great that the peace and harmony of the world are imperilled; and an improvement of those conditions is urgently required: as for example, by the regulation of the hours of work, including the establishment of a maximum working day and week, the regulation of the labour supply, the prevention of unemployment, the provision of an adequate living wage, the protection of the worker against sickness, disease and injury arising out of his employment, the protection of children, young persons and women, provision for old age and injury, protection of the interests of workers when employed in countries other than their own, recognition of the principle of freedom of association, the organization of vocational and technical education and other measures;

“Whereas also the failure of any nation to adopt humane conditions of labour is an obstacle in the way of other nations which desire to improve the conditions in their own countries:

“The High Contracting Parties, moved by sentiments of justice and humanity as well as by the desire to secure the permanent peace of the world, agree to the following.”

The scheme of organization provides for an International Labour Conference, to be held at least once a year, and a permanent International Labour Office.

The International Labour Conference is composed of four delegates from each Member of the Organization, two representatives of the government, one of the employers and one of the workpeople. Its task is to consider proposals dealing with questions similar to those laid down in the preamble and to embody its findings in draft conventions or recommendations. Each Member binds itself to bring such of these conventions and recommendations as are adopted by a two-thirds majority of the Conference before the competent authority or authorities. The authority has complete liberty to decide whether or not it will ratify any or all of these conventions, and what action, if any, it will take on the recommendations.

It is of special interest to Canada that the Treaty recognizes the limited power of a federal government, and provides that in the case of a federal state, the authority of which to enter into conventions on labour matters is limited, the federal government may treat a draft convention as a recommendation only.

Article 396 of the Treaty states that “the functions of the International Labour Office shall include the collection and distribution of information on all subjects relating to the international adjustment of conditions of industrial life and labour, and particularly the examination of subjects which it is proposed to bring before the Conference, with a view to the conclusion of international conventions and the conduct of such special investigations as may be ordered by the Conference.”

The International Labour Office is required to collect all available information in regard to the problems to be dealt with, and to prepare draft conventions or recommendations for submission to the Conference. The work of the Office has been divided, for the proper performance of its duties, into two divisions, namely: the Diplomatic Division, which conducts the correspondence with Governments and is called upon to deal “with the questions connected with the obligations entailed by the labour provisions of the Treaty and in particular with those relating to the

¹Contributed by the Department of Labour, Ottawa.

work of the International Labour Conference," and the Scientific Division, which is "responsible for the collection, compilation and dissemination of information of international interest and importance about industry and labour conditions in all countries." Technical services have been created to supply the necessary information on technical questions such as maritime problems, industrial hygiene, employment and unemployment, hours of labour, agriculture, alien labour, employment of women, home work, wages, social insurance, education and co-operation.

The International Labour Office is under the direction of a governing body composed of twenty-four persons elected by the International Labour Conference. Of these, twelve are persons representing governments, six representing employers and six representing workers. Under the terms of Article 393, eight of the government seats on the governing body are held by the countries of "chief industrial importance." Canada was designated by the Council of the League of Nations as one of the eight countries of "chief industrial importance," and Hon. James Murdock, Minister of Labour, was designated in January, 1922, by the Government of Canada as its representative on the governing body. Mr. P. M. Draper, secretary of the Trades and Labour Congress of Canada, was chosen at the first session of the International Labour Conference (1919) as one of the six workers' representatives on the governing body. At the election held in 1922, Mr. Tom Moore, president of the Trades and Labour Congress of Canada, was elected to the seat previously held by Mr. Draper.

The proceedings of the first three sessions of the International Labour Conference have been described in the 1921 Year Book (see pp. 608-609) and the proceedings of the fourth session in the 1922-23 Year Book (see pp. 705-706).

The following is a summary of the matters dealt with at the various sessions of the International Labour Conference.

The more important draft conventions and recommendations adopted at the first session of the International Labour Conference at Washington in 1919 were those respecting the limitation of the hours of work, unemployment, the reciprocal treatment of foreign workers, the employment of women before and after childbirth, the prevention of anthrax, the employment at night of women and young persons, the protection of women and children against lead poisoning, the establishment of government health services and the minimum age for admission of children to industrial employment. A recommendation was also passed concerning the application of the Berne Convention of 1906, on the prohibition of white phosphorus in match manufacturing.

At the second session held at Genoa in 1920, recommendations and draft conventions were passed regarding the limitation of hours of work in the fishing industry and in inland navigation, the establishment of national seamen's codes, the minimum age for admission of children to employment at sea, unemployment insurance for seamen, unemployment indemnity in case of loss or foundering of the ship and the establishment of facilities for finding employment for seamen.

The third session held in Geneva in 1921 dealt mainly with conditions of employment in agriculture; draft conventions and recommendations adopted concerned the problems, from an agricultural viewpoint, of unemployment, the protection of women workers before and after childbirth, night work of women and young persons, the age of admission of children to employment, the development of technical agricultural education, workers living-in conditions, their rights to unite and to compensation and social insurance. In addition to these recommendations respecting agricultural workers, other subjects dealt with were the use of white lead in

painting, the application of the weekly rest in industrial and commercial undertakings, the minimum age for admission of young persons to employment as trimmers and stokers and the compulsory medical examination of young persons employed at sea.

At the fourth session held at Geneva in 1922, recommendations were adopted concerning the communication to the International Labour Office of statistical and other information of emigration and immigration, and the repatriation and transit of emigrants.

The fifth session, which also took place at Geneva, was in 1923 and dealt with the general principles of organization of systems of inspection required to secure the enforcement of the laws and regulations for the protection of workers.

At the sixth session in 1924, recommendations were adopted concerning the development of facilities for the utilization of workers' spare time.

Canadian Action on Decisions of International Labour Conference.—

As the draft conventions and recommendations of the International Labour Conferences were received by the Department of Labour from the League of Nations, they were referred to the Department of Justice for decision as to the legislative authority of the Dominion or the Provincial Governments to deal with the matters discussed. The draft conventions and recommendations found to be within provincial authority were referred to the Provincial Governments, while those within Dominion jurisdiction are engaging the attention of the Dominion Government, and have also been brought before Parliament.

Legislation was adopted at the 1924 session of the Parliament of Canada amending the Canada Shipping Act to give effect to the 1920 draft conventions relative to the employment of seamen. These draft conventions fixed the minimum age for admission of children to employment at sea, and of young persons to employment as trimmers or stokers, and dealt with unemployment indemnities for those suffering in case of loss or foundering of ships, and with the compulsory medical examination of children and young persons employed at sea. The amendment to the Canada Shipping Act (14-15 Geo. V, c. 12) will come into force on proclamation of the Governor in Council.

The Government of Canada has notified the Secretary-General of the League of Nations of its acceptance, in November, 1923, of the recommendations adopted by the International Labour Conference in 1922, regarding the communication to the International Labour Office of statistical and other information on emigration, immigration and the repatriation and transit of emigrants.

The eight-hour day convention, adopted at the 1919 session of the International Labour Conference, proposing the limitation of hours of work in industrial undertakings to eight in a day and forty-eight in a week, was referred, by resolution of the House of Commons in May, 1924, to the select standing committee on industrial and international relations for examination and report. The labour provisions of the Treaties of Peace and the Order in Council of November, 1920, dealing with the jurisdiction of the Dominion and Provincial Governments, respectively, had to be considered closely in this connection.

The committee took evidence with respect to the present position of the eight-hour day in industrial employment in Canada and other countries; information was also presented to show that, in spite of measures taken to clarify the matter, doubt still existed in certain quarters as to the jurisdiction of the Dominion and provincial authorities.

It was accordingly recommended that this draft convention be referred to the Supreme Court of Canada for hearing and consideration under section 60 of the Supreme Court Act; questions that will serve to secure an advisory judgment from the court on the jurisdiction of the Dominion Parliament and the Provincial Legislatures, respectively, were also submitted. This report was adopted by the House of Commons on July 18, 1924.

Provincial legislation on draft conventions and recommendations.—

It was indicated at a conference between representatives of the Dominion and Provincial Governments in 1923 that the proposals contained in certain of the draft conventions and recommendations of the International Labour Conference had already been given effect in Canada through provincial legislation.

The British Columbia Legislature adopted an act in 1921 accepting the proposals contained in the eight-hour day convention of the International Labour Conference, with the reservation that the legislation remain in abeyance until the measure was adopted in the other provinces. In 1923, however, the British Columbia Parliament passed an act providing for the introduction of the eight-hour day and forty-eight hour week in industrial undertakings. This new Act has effect from January 1, 1925, and will be administered by a board of adjustment composed of three members, with the provincial Deputy Minister of Labour as chairman.

The Manitoba Legislature in 1923 passed a resolution preparing the way for giving effect to the draft convention of 1919 on maternity. The provincial Bureau of Labour was directed to investigate conditions as to the employment of mothers in industry, in order to establish what need might exist for protective legislation. This investigation showed that the cases of women being employed in industry shortly before or after child-birth were so rare in Manitoba as to make immediate action unnecessary.

The Legislature of Saskatchewan adopted a resolution in March, 1924, accepting the principles of certain draft conventions and recommendations and portions of recommendations of the International Labour Conference in 1919 and 1921. This province authorized the Dominion Government to inform the League of Nations of its endorsement of certain articles concerning the prohibition of commercial employment agencies and the co-ordination of public works, with a view to reserving them for periods of unemployment, the adoption of modern, technical, improved and intensive methods of agriculture, the rendering accessible of temporary work for unemployed agriculturists by means of the provision of transport facilities and the development of employment opportunities for agricultural workers suffering from seasonal unemployment, fixing the minimum age for admission of children to industrial and agricultural employment, the rights of association and combination of agricultural workers, the employment of women during the night and the development of technical agricultural education.

The Legislature of Nova Scotia also adopted a resolution in April, 1924, endorsing the principles of the same draft conventions and recommendations as were accepted in Saskatchewan and authorizing the Dominion Government to notify the League of Nations of its acceptance of these principles.

Results of the International Labour Conferences.—To date (May 1924) the results attained in the execution of the draft conventions and recommendations adopted by the International Labour Conference are as follows: 96 ratifications registered by the Secretary-General of the League of Nations; 13 countries have notified their adherence to the Berne Convention on white phosphorus; 47 ratifications authorized by the competent authority but not yet communicated; 135 rati-

fications recommended to the competent authority by the government but approval not yet signified; 123 measures finally adopted by legislative authorities, giving effect partially or wholly to the provisions of the draft conventions or recommendations; and 85 legislative measures of all descriptions proposed, but not yet wholly adopted, which are intended to give effect partially or wholly to the provisions of the draft conventions and recommendations.

4.—Organized Labour in Canada.

The Department of Labour publishes an annual report on Labour Organization in Canada which sets out the various branches of unionism in existence, the principles on which they are respectively founded, their chief activities and statistics of the different groups comprised in the trade unions of the Dominion. Reference is also made in this annual report to the principal international labour organizations with which the organized workers in Canada are affiliated.

Trade unionism in Canada occupies a unique position, by reason of the fact that most organized workers in the Dominion are members of organizations whose headquarters are located in a foreign country, *viz.*, the United States. This condition is explained when it is understood that workers move freely from one country to the other in order to find employment. In years gone by, Canadian workmen who sought a livelihood in the United States greatly outnumbered those from that country who came to Canada. As industry was further developed in the United States, there arose a number of unions of various crafts, and with these the Canadian workers soon became affiliated. With the development of industry in the Dominion, many of these Canadians subsequently returned to their native land, bringing with them the gospel of trade unionism and collective bargaining as a means of protecting their rights. In many instances these trade unionists became the nuclei of strong bodies of organized labourers formed in Canadian cities.

In the early part of the nineteenth century, a number of independent trade associations were formed in Canada, the earliest of which there is record being a printers' organization in Quebec city in 1827. The first union known to have been organized in the province of Ontario was also composed of printers, and operated in York (now Toronto) as early as 1834; both of these bodies were later superseded by branches of the International Typographical Union, which body in 1869 changed its name from National Typographical Union of the United States, on account of the inclusion of Canadian branches.

In 1851 a branch of the Amalgamated Society of Engineers, a British organization composed of metal mechanics, was established in Toronto. In the years immediately following, other branches were organized in other Canadian cities, the society having the whole Dominion for its operations. In 1888 the United Machinists and Mechanical Engineers of America was formed, and entered the field as a competitor for the organization of the craftsmen eligible for membership in the Amalgamated Society. The first Canadian lodge (No. 103) of the new body was formed in Stratford, Ont., in 1890, while lodges in Montreal (No. 111) and in Winnipeg (No. 122) were organized before the close of the same year. After the extension of its jurisdiction into Canada the name of the organization was changed in 1891 to the International Association of Machinists. Since that time the organization has added greatly to its Canadian following, having at the close of the year 1923, 86 local lodges with a combined membership of 9,382. On the other hand, the Amalgamated Society never added very greatly to its Canadian following, the largest number of local branches and members on record being in 1919, when they

stood at 24 and 3,000 respectively. Negotiations were opened in 1919 by the general officers of the Amalgamated Society of Engineers and the International Association of Machinists, with a view to effecting an amalgamation. As a result, the Amalgamated Society on Sept. 30, 1920, withdrew its operations from Canada and also from the United States, where branches were also in existence, leaving the whole North American continent to the International Association of Machinists. Another British labour organization to establish branches in Canada was the Amalgamated Society of Carpenters and Joiners, now the Amalgamated Society of Woodworkers, which in 1860 chartered a branch in London, twenty-one years before the United Brotherhood of Carpenters and Joiners, now the chief organization of the craft in North America came into existence. In this case also, bickerings finally led to a unification whereby the members of the Amalgamated Society became also members of the United, retaining their connection with the parent body for its beneficial features. In 1922, owing to a decision of the United Brotherhood which inhibited members of local branches of the Amalgamated Society from holding certain official positions in district councils and also to the refusal of the United Brotherhood to grant charters to local branches of the Amalgamated formed subsequently to the plan of unification becoming effective, a division occurred, and the fifteen unrecognized branches of the Amalgamated Society are now operating independently of the United Brotherhood, with which, however, fifteen Amalgamated branches are still connected. The only other branch of a British labour organization in Canada is a lodge in Canso, N.S., of the Association of Wireless and Cable Telegraphers. With the practical elimination of the British organizations, the North American field has been left entirely to the labour organizations originating on this continent. These labour bodies are for the most part in affiliation with the American Federation of Labour, which, in addition to dealing with trade matters, speaks for the organized workers in the United States on the subject of legislation. In Canada, the legislative mouthpiece of organized labour is the Trades and Labour Congress, which body is strongly representative of the international labour movement, its affiliated membership being largely drawn from international organizations which have in the first place been affiliated with the American Federation of Labour. Under the travelling card system now in vogue, members of the respective unions move as they desire between the two countries and are entitled to all rights and privileges established in the various localities where local branches are in existence. Canadian members of international organizations are eligible for the highest offices in the gift of their organizations, and in some instances have been elected to these posts.

In addition to the international trade union membership in Canada, there are labour bodies which are termed non-international. Some of these organizations were formed by former members of international unions, who, for various reasons, severed their connection with the parent bodies. There are also a number of independent labour unions in the Dominion, their origin in a few instances being an outcome of grievances against their central organizations not settled to the satisfaction of the complaining branches.

A statement of the development of organized labour in Canada would not be complete without a reference to the Knights of Labour, an organization formed in the United States in 1869, to which all classes of workers were admitted. The Knights of Labour, which in 1885 reached its greatest numerical strength with about a million members, extended its jurisdiction into Canada, establishing district and local assemblies in many localities in the Dominion, seventeen of which were operating in 1891 in the province of Quebec. Soon after the latter date,

internal dissension took place in the ranks of the organization, owing to the difficulty of uniting workers of different crafts in one body. The international craft organizations, which had in the meantime become united under the banner of the American Federation of Labour, formed in 1881, offered strong opposition to the Knights of Labour, which in a few years ceased to be a factor in the labour movement of the continent. All of its Canadian "assemblies" have long since passed out of existence.

Trades and Labour Congress of Canada.—Through the initiative of the Toronto Trades Assembly (now the Toronto District Trades and Labour Council), the first national labour organization, the Canadian Labour Union, was formed in Toronto in September, 1873. The organization held its second and third annual meetings in 1874 and 1875, but disappeared as a result of the serious depression of the later 70's. In 1883 the Trades and Labour Council of Toronto, feeling the necessity of the wage earners of Canada having a medium through which to express their opinions, assumed the responsibility of calling another trades and labour congress, which met in Toronto on Dec. 26, with 45 delegates. On the summons of the Toronto council, a second meeting, with 109 delegates, assembled on Sept. 14, 1886, the first occasion on which any labour body outside of the province of Ontario was represented. A permanent organization was effected at this meeting under the name of "Trades and Labour Congress of the Dominion of Canada." This was the title of the organization until 1895, when the title "Trades and Labour Congress of Canada" was adopted in preference to "Canadian Federation of Labour." Since 1886 conventions have been held annually, the 1924 meeting in London being counted as the fortieth. The Trades and Labour Congress is representative of international trade unionism in the Dominion, the bulk of its membership being drawn from the international organizations which have local branches in Canada. According to reports for 1923, the congress received payment of per capita tax from 58 international bodies and three national organizations which had their entire membership in the Dominion, with a total membership of 114,986, in 1,532 local branches. With other affiliations and unions directly under charter, the congress had in all at the close of 1923 a membership of 122,844, in 1,680 branches.

Membership of International Organizations in Canada.—At the close of 1923 there were 94 international organizations having one or more local branch unions in Canada, two more than in 1922. These bodies between them had 2,079 local branches in the Dominion with 203,843 members, a decline of 29 branches and 2,307 members as compared with the previous year. The international organizations represent 73 p.c. of the total of all classes of workers in the Dominion organized under trade union auspices.

Canadian Federation of Labour.—The Canadian Federation of Labour was organized in 1902, under the name of National Trades and Labour Congress, as the result of the expulsion from the Trades and Labour Congress of Canada of the Knights of Labour assemblies and all other unions which were composed of members of crafts over which existing international organizations claimed jurisdiction. The delegates of the expelled unions forthwith formed a new central body of a distinctively national character, which in 1908 adopted its present name. For a number of years labour bodies in the province of Quebec were the main support of the new organization. Gradually the Quebec affiliations dropped off and the centre of activity was a few years ago shifted to Toronto. The membership of the Federation at the close of 1923 stood at 14,774, comprised in 15 directly chartered local branches. Two central bodies are also affiliated with the Federation, the

membership of which, as well as that of the directly chartered locals here enumerated, is included in the standing of the non-international trade union membership.

Non-international Trade Union Membership.—There are in Canada 18 organizations of wage earners termed "non-international" unions, 7 of which are in direct opposition to the international organizations. In some instances these non-international bodies have been formed by secessionists from international unions. The combined membership of the non-international organizations is 34,315, comprised in 278 local branches.

Membership of Independent Units.—There are 24 independent local labour bodies in the Dominion, 22 of which have a membership of 9,934. The remaining two have not reported as to their standing.

Federation of Catholic Workers of Canada.—During the period when the Knights of Labour operated in Quebec, there existed also four independent unions, one of labourers and three of leather and shoe workers. Up to 1902 these several bodies were represented at the annual conventions of the Trades and Labour Congress of Canada. In that year, in an effort to eliminate a duplication of unions, and to bring the independent bodies under the banner of the international organizations, the Trades Congress denied them further representation. The Knights of Labour assemblies gradually disappeared, but the independent unions continued to exist. With the advent of the Mutual Labour Federation of the North in 1912, the first organization to confine membership to adherents of the Roman Catholic church, a stimulus was given to this movement, and several of the existing independent unions, the number of which had increased during the decade from 1902 to 1912, became identified with what are termed National and Catholic unions. In 1918 a conference of these bodies was held in Quebec city, followed by other meetings in Three Rivers in 1919 and Chicoutimi in 1920; the delegates at the latter conference, numbering 225 from 120 unions, decided to establish a permanent central body to co-ordinate the work of the scattered units. Accordingly, at the 1921 conference held in Hull, at which approximately 200 delegates were present, representing 89 unions, a constitution to govern the new body was approved. The name selected was Federation of Catholic Workers of Canada, and permanent officers were elected, the constitution and by-laws to become effective on January 1, 1922. From information at hand, there are 106 National and Catholic unions with a combined membership of 30,000.

One Big Union.—Owing to dissatisfaction with the alleged reactionary policy of the Trades and Labour Congress of Canada, a number of delegates from Western Canada to the Quebec convention in 1918 held a caucus for the purpose of having the delegates from the western unions concentrate their energies towards having the Trades Congress legislate in accordance with the views of these bodies. Some months later a meeting of delegates was called by the British Columbia Federation of Labour, to assemble immediately following the annual convention of that body, which, for the first time in its history, met outside of the province under its jurisdiction, in the city of Calgary. The conference assembled on March 13, 1919, with 239 delegates present; the outcome of the meeting was the formation of an industrial organization, the "One Big Union." On June 11, 1919, a conference of the advocates of the new body was held in Calgary to further the plans of organization. The next meeting, termed the first semi-annual convention, was held in Winnipeg in January, 1920. The O.B.U. had made much progress during its short existence, with a membership of 41,150 at the close of 1919. From the outset, the O.B.U. met with much opposition from the old-established labour unions, represented by the Trades and Labour Congress of Canada, which was opposed to the substitution

of industrial unionism for the existing system of craft unions. Since 1920, however, the O.B.U. has been on the decline, many of the original members having given up their membership and re-affiliated with their respective parent bodies.

Total Reported Membership of Organized Labour in Canada.—At the close of 1923, the numerical strength of organized labour in Canada is given by the Department of Labour as follows: international organizations, 2,079 local branches with an aggregate membership of 203,843; non-international organizations, 278 branches and 34,315 members; independent units, 24 with 9,934 members, and National and Catholic unions, 106 with 30,000 members. Grand total, 2,487 local branches and 278,092 members. As compared with 1922, this represents a decrease of 25 branches but an increase of 1,471 members.

Table 6 shows by years the membership of trade unions in Canada since 1911. (See also diagram on p. 712 of the 1922-23 Year Book).

6.—Membership of Trade Unions in Canada, 1911-1923.

Years.	Members.	Years.	Members.
1911.....	133,132	1917.....	204,630
1912.....	160,120	1918.....	248,887
1913.....	175,799	1919.....	378,047
1914.....	166,163	1920.....	373,842
1915.....	143,343	1921.....	313,320
1916.....	160,407	1922.....	276,621
		1923.....	278,092

International Trade Unions Operating in Canada.—Table 7 gives the names of the 94 international labour organizations which now carry on operations in Canada, and contains (1) the number of branches which were in existence in the Dominion at the close of 1923, and (2) the reported membership. The reported membership in Tables 7 and 8 is given in italics where the information has been obtained from sources other than the headquarters of the indicated organization.

7.—International Trade Unions Operating in Canada.

NUMBER OF BRANCHES AND NUMBER OF MEMBERS IN CANADA, DECEMBER, 1923.

International Organizations.	No. of branches in Canada.	Reported members in Canada.
American Federation of Labour.....	10	501
Asbestos Workers, International Association of Heat and Frost Insulators and...	2	70
Bakery and Confectionery Workers' International Union of America.....	7	279
Barbers' International Union of America, Journeymen.....	34	1,211
Bill Posters and Billers of America, International Alliance of.....	2	300
Blacksmiths, Drop Forgers and Helpers, International Brotherhood of.....	22	1,041
Boilermakers, Iron Shipbuilders and Helpers, International Brotherhood of.....	36	2,542
Bookbinders, International Brotherhood of.....	12	443
Boot and Shoe Workers' Union.....	15	1,707
Brewery, Flour, Cereal and Soft Drink Workers, International Union of the United.....	10	411
Bricklayers, Masons and Plasterers' International Union of America.....	49	4,500
Bridge, Structural and Ornamental Iron Workers, International Association of....	10	408
Broom and Whisk Makers' Union, International.....	2	35
Carpenters and Joiners, Amalgamated Society of.....	15	1,857
Carpenters and Joiners of America, United Brotherhood of.....	112	7,603
Carvers' Association of America, International Wood.....	1	20
Cigarmakers' International Union of America.....	11	672
Cloth Hat and Cap Makers of America, United.....	4	540
Clothing Workers of America, Amalgamated.....	15	7,715
Commercial Telegraphers' Union of America.....	8	1,900
Conductors, Order of Sleeping Car.....	1	12
Coopers' International Union of North America.....	1	23
Electrical Workers, International Brotherhood of.....	30	4,115
Elevator Constructors, International Union of.....	1	24
Federal Employees, National Federation of.....	1	200
Firemen and Oilers, International Brotherhood of.....	8	111

7.—International Trade Unions Operating in Canada—concluded.

International Organizations.	No. of branches in Canada.	Reported members in Canada.
Fire Fighters, International Association of.....	19	2,400
Foundry Employees, International Brotherhood of.....	1	25
Fur Workers' Union, International.....	6	900
Garment Workers of America, United.....	10	700
Garment Workers' Union, International Ladies.....	7	1,245
Glass Bottle Blowers' Association of the United States and Canada.....	4	187
Glass Workers' Union, American Flint.....	3	166
Glove Workers' Union of America, International.....	2	
Granite Cutters' International Association of America.....	4	180
Hod Carriers, Building and Common Labourers' Union of America, International.....	5	185
Hotel and Restaurant Employees' International Alliance and Bartenders' International League of America.....	11	839
Iron, Steel and Tin Workers, Amalgamated Association of.....	9	357
Jewellery Workers' Union, International.....	4	200
Lathers, International Union of Wood, Wire and Metal.....	6	134
Laundry Workers' International Union.....	1	72
Leather Workers' International Union, United.....	3	60
Lithographers of America, Amalgamated.....	7	387
Longshoremen's Association, International.....	16	2,145
Locomotive Engineers, Brotherhood of.....	100	6,342
Locomotive Firemen and Enginemen, Brotherhood of.....	102	7,846
Machinists, International Association of.....	86	2,382
Maintenance-of-Way Employees and Railway Shop Labourers, United Brotherhood of.....	184	10,000
Meat Cutters and Butcher Workmen, Amalgamated.....	2	91
Metal Polishers' International Union.....	5	200
Metal Workers' International Alliance, Amalgamated Sheet.....	18	600
Mine Workers of America, United.....	72	22,500
Mine, Mill and Smelter Workers, International Union of.....	3	460
Moulders' Union of North America.....	37	2,200
Musicians, American Federation of.....	46	7,000
Painters, Decorators and Paperhangers of America, Brotherhood of.....	31	1,198
Papermakers, International Brotherhood of.....	20	1,300
Pattern Makers' League of North America.....	14	397
Paving Cutters' Union of the United States and Canada.....	5	150
Photo Engravers' Union of North America, International.....	5	291
Piano, Organ and Musical Instrument Workers' International Union.....	1	21
Plasterers and Cement Finishers' International Association, Operative.....	17	913
Plumbers, Gas and Steam Fitters, United Association of.....	36	1,800
Potters, National Brotherhood of Operative.....	1	34
Printers and Die Stampers' Union, International Plate.....	1	46
Printing Pressmen and Assistants' Union, International.....	16	1,278
Pulp, Sulphite and Paper-Mill Workers of the United States and Canada, International Brotherhood of.....	17	1,775
Quarry Workers' International Union of North America.....	1	295
Railroad Employees, Canadian Brotherhood of.....	154	13,290
Railroad Signalmen of America, Brotherhood of.....	6	204
Railroad Telegraphers, Order of.....	13	6,160
Railroad Trainmen, Brotherhood of.....	95	14,526
Railway Carmen of America, Brotherhood of.....	114	10,853
Railway and Steamship Clerks, Freight Handlers, Express and Station Employees, Brotherhood of.....	47	2,000
Railway Conductors, Order of.....	72	4,415
Railway Employees of America, Amalgamated Association of Street and Electric.....	28	7,500
Retail Clerks' International Protective Association.....	3	288
Roofers, Damp and Waterproof Workers' Association, United State, Tile and Composition.....	1	7
Seamen's Union of America, International.....	2	1,460
Siderographers, International Association of.....	1	12
Stage Employees, International Alliance of Theatrical.....	36	1,060
Steam and Operating Engineers, International Union of.....	28	955
Steam Shovel and Dredgemen, International Brotherhood of.....	5	1,400
Stereotypers and Electrotypers' Union, International.....	10	270
Stonecutters' Association of North America, Journeymen.....	17	470
Stove Mounters' International Union.....	3	75
Switchmen's Union of North America.....	9	316
Tailors' Union of America, Journeymen.....	11	371
Teamsters, Chauffeurs, Stablemen and Helpers, International Brotherhood of.....	9	782
Textile Workers of America, United.....	3	2,835
Typographical Union, International.....	49	4,384
Upholsterers' International Union of America.....	7	222
Wireless and Cable Telegraphers, Association of.....	1	47
Total.....	2,076	198,243
Industrial Workers of the World.....	3	5,600
Grand Total.....	2,079	203,843

Table 8 gives the number of branches and of members of non-international trade unions operating in Canada at the close of 1923.

8.—Non-international Trade Unions Operating in Canada.

NUMBER OF BRANCHES AND NUMBER OF MEMBERS, DECEMBER, 1923.

Organizations.	No. of branches or affiliations.	Members reported.
Trades and Labour Congress of Canada.....	37	4,773
Canadian Federation of Labour.....	15	14,774
Associated Federal Employees of Canada.....	3	315
Amalgamated Civil Servants of Canada.....	11	1,064
Brotherhood of Dominion Express Employees.....	25	1,642
Canadian Association of Railway Enginemen.....	20	405
Canadian Association of Stationary Engineers.....	12	350
Canadian Carpet Weavers' Beneficial Association.....	4	225
Canadian Electrical Trades Union.....	5	1,750
Canadian Federation of Bricklayers, Masons and Plasterers.....	6	923
Canadian Great Lakes Fishermen's Protective Association.....	1	40
Dominion Postal Clerks' Association.....	37	3,200
Dominion Postal Porters' and Transfer Agents' Association.....	12	418
Dominion Railway Mail Clerks' Federation.....	14	1,145
Federated Association of Letter Carriers.....	43	1,919
National Association of Marine Engineers.....	17	988
Provincial Federation of Ontario Fire Fighters.....	13	329
Saskatchewan Brotherhood of Steam and Operating Engineers.....	3	55
Total.....	278	34,315

5.—Fatal Industrial Accidents.

Statistics of fatal industrial accidents have been compiled by the Department of Labour since 1903, the data being obtained from provincial Workmen's Compensation Boards, the Board of Railway Commissioners for Canada and various other governmental authorities. Table 9 shows the number of fatal industrial accidents reported to the Department during 1923, and to the end of September, 1924. The number of fatalities in each of the different industrial divisions is also shown as a percentage of the total number.

9.—Fatal Industrial Accidents in Canada, 1923 and 1924.

Industries.	Twelve Months, 1923.		Nine Months, 1924.	
	Number of accidents.	Percentage of total.	Number of accidents.	Percentage of total.
Agriculture.....	129	9.1	71	7.6
Logging.....	195	13.8	143	15.3
Fishing and trapping.....	29	2.1	25	2.7
Mining, non-ferrous smelting and quarrying.....	187	13.3	129	13.8
Manufacturing.....	198	14.0	130	14.0
Construction.....	177	12.5	146	15.6
Transportation and public utilities.....	372	26.4	217	23.1
Trade.....	24	1.7	8	0.9
Service.....	61	4.3	21	2.2
Miscellaneous.....	40	2.8	45	4.8
All Industries.....	1,412	100.0	935	100.0

During the first three quarters of 1924, 935 deaths were caused by industrial accidents, as compared with 1,033 in the same nine months of the preceding year. This decline of 9.5 p.c. was largely due to the smaller number of major fatalities, or accidents that cause the deaths of five or more persons, recorded in 1924. During the January-September period of 1923, 70 persons lost their lives in such accidents, while in 1924 only 14 deaths were due to major fatalities.

Of the 1,412 fatalities recorded in Canada during 1923, 372, or 26.4 p.c., were reported in the transportation and public utilities group, 168 of these taking place in the steam railway service, and 100, or 7.1 p.c., in water transportation. There were 97 deaths in the steam railway service caused by persons being struck by, run over, or crushed by or between cars and engines; 28 were due to derailments and collisions, and 25 to falls from cars and engines. In the water transportation group there were 59 deaths from drowning; 18 were caused by falls into holds of vessels, 10 by falls from elevations, and 7 occurred in the handling of cargoes, etc. The manufacturing group accounted for 198 deaths, or 14 p.c. of the total fatalities reported for the year, 56 of these being caused by machinery and its connections and 15 by electricity. In the mining, smelting and quarrying group there occurred 187 deaths, or 13.3 p.c. of the total fatalities recorded. Of these, 113 were in the coal-mining industry, in which falls of rock, stone and other materials and cave-ins accounted for 48. Explosions caused 35 deaths in the group; 33 of these took place in a major fatality at Cumberland, B.C., in February. Deaths to the number of 19 were caused by accidents in connection with mine and quarry cars. In the logging industry, 195 fatalities were reported, or 13.8 p.c. of the total. Falling trees, branches, etc., were responsible for 78 and drownings for 39 deaths in this group, which is regarded as one of the most hazardous in proportion to the numbers employed. In agriculture the fatalities reported numbered 129, or 9.1 p.c. of the total; of this number 46 were due to horses kicking, bolting, etc., and 9 to persons being gored by bulls.

The record of all industries shows 92 deaths due to machinery and its connections, 55 to hoisting apparatus and 207 to dangerous substances. The last classification includes 16 deaths caused by steam escapes, boiler explosions and compressed air, 85 by explosive substances, 42 by electricity and 25 by gas fumes, etc. There were 220 deaths caused by falling objects, 184 by falls of persons, 147 by drowning, 66 by animals and 54 while handling objects.

The distribution of fatalities in 1923, according to provinces, showed Ontario with the highest record, 514, while in British Columbia and Quebec there were 322 and 185 deaths, respectively.

An analysis of the record by months shows that the largest number of deaths occurred in October, in which there were 139 fatalities; this was followed by August and July with 137 and 136 deaths, respectively.

6.—Emp'oyers' Liability and Workmen's Compensation in Canada.

Throughout the greater part of the 19th century it was generally held, in Canada as in England, that workers in hazardous trades received higher wages than the average as compensation for the ordinary risks incidental to their occupation, and they were, therefore, considered to have assumed these ordinary risks. It was also held that the injured workman or his dependants could not recover damages if the worker had been injured or killed through the negligence of a fellow-servant or if his own negligence had been a contributory cause. Under the British Employers' Liability Act of 1880 and the Ontario Act of 1886, fellow-servants in the position of foremen or superintendents were for the first time regarded as standing to the ordinary worker in the place of the employer, who was held liable for injuries due to their negligence. British Columbia passed an Employers' Liability Act in 1891, which was amended in 1892 and remodelled ten years later. The Manitoba Act of 1893 was amended in 1895 and 1898 and consolidated in 1902, while a new Act was passed in 1910. Similarly, the Nova Scotia Act of 1900 was replaced by a new measure in 1909. New Brunswick passed an Employers' Liability Act in 1903 and amended it in 1907 and 1908. Alberta passed an Act in 1908, Quebec in 1909 and Saskatchewan in 1911. Most of these Acts followed generally along the lines of British legislation, while the 1909 Act of Quebec is an outgrowth of the Civil Code of that province. All these Acts involved resort to the courts.

A new epoch in legislation of this kind was begun by the Ontario Act of 1914, based upon the report of a Royal Commission, and introducing the new principle of making compensation for accidents a charge upon the industry concerned, instead of a liability of the individual employer. The working out of this principle involved the creation of a state board administering an accident fund made up exclusively of compulsory contributions from employers grouped in classes and assessed according to the hazard of the industry. The example of Ontario in passing an Act of this kind was followed by Nova Scotia in 1915, British Columbia in 1916, Alberta and New Brunswick in 1918 and Manitoba in 1920. Quebec and Saskatchewan retain systems instituted in 1909 and 1911, respectively, which enable workmen to obtain compensation from their employers individually through private insurance companies or by means of action in the courts. The Quebec Legislature, under an Act passed in 1922, appointed a special commission in the following year to consider and report upon the subject of workmen's compensation. This commission was expected to present its report at the 1925 session of the provincial legislature. In

Manitoba also, a joint commission, composed of equal numbers of members of the legislature and of representatives of the workmen and their employers, was provided for at the last session of the legislature to study every phase of compensation, during the recess, with a view to eliminating the need for yearly amendments to the Act and to placing it upon a permanent basis. The report of this committee is likely to be presented at the legislative session early in 1925.

Workmen's Compensation Acts in Canada cover practically the whole industrial field, including manufacturing, construction, lumbering, mining, quarrying, transportation and public utilities. In Ontario certain industries (including municipal undertakings, railways, car shops, telegraphs, telephones, etc.) are made individually liable to pay compensation, and are, therefore, not called upon to contribute to the general compensation or accident funds. Other industries, with the exception of those which are specifically excluded, may be brought under the terms of the Act on application from the employer, with the Board's approval. In Alberta the consent of the employees is also required. In most provinces the excluded classes include travellers, casual labourers, out-workers, domestic servants and farm labourers. In Nova Scotia, however, an amendment was passed in 1922 providing for the admission of farm labourers and domestics on application of their employers. British Columbia in the same year admitted farm labourers and repealed a former rule excluding office workers.

The Dominion Parliament in 1918 passed an Act (8 Geo. V, c. 15) providing that the compensation to be paid where employees of the Dominion Government were killed or injured in the course of their employment should be the same as they or their dependants would receive in private employment in the province where the accident occurred, the amount to be determined by the Provincial Board or other constituted authority and paid by the Dominion Government.

The principal features of the Workmen's Compensation and Employers' Liability Acts in force in the various provinces during 1923 were given on pages 718-721 of the 1922-23 Year Book.

Important amendments were made during 1924 in the Workmen's Compensation Acts of Alberta, New Brunswick and Ontario.

In Alberta the percentage of payment in disability cases was raised from 55 to 62½; this is the proportion of average weekly earnings allowed in cases of permanent total disability, while, in cases of partial disability, it is the proportion of the difference between the workers' former and present earning capacity. It was arranged that the average earnings of a person with a permanent total disability should be agreed upon by the employer and the workman. The time limit in which claims must be made was raised to 12 months in another amendment. The Alberta Act was also changed during 1924 to provide for a higher scale of payment to the dependent children of a deceased workman; \$12 is allowed for the first, \$10 for the second, \$9 for the third and \$8 each for other children. Where children are the only dependants, \$15 per month is allowed for each child.

A 1924 amendment to the Ontario Act contains a new feature in compensation legislation in Canada, enabling the Board to spend up to \$100,000 on the rehabilitation of injured workmen who are incapacitated from following their previous occupations.

Amendments to the New Brunswick Act require the Board in that province to penalize any employers who fail to submit their payrolls, and provide that the assessments under the Act shall be a first lien upon the property of an employer.

7.—Strikes and Lockouts.

Statistics of strikes and lockouts in Canada have been collected and published by the Department of Labour since its inception in 1900. Table 10 shows the number of disputes, the number of employers and employees involved and the time loss in working days for each year from 1901 to 1923, and the totals for the period. The items in the column headed "time loss in working days" in the tables following, are calculated by multiplying the number of persons directly affected through strikes or lockouts by the number of working days they are so affected during the time the disputes are in existence.

Statistics for the first ten months of 1924 show that there were 63 disputes affecting 267 employers and 32,978 employees. The time loss during the ten months was 1,886,616 working days. This was nearly three times the time loss from January 1 to October 31, 1923, when 633,421 working days had been lost in industrial disputes. Most of the time loss from April to September, 1924, inclusive, approximately 200,000 days each month, was due to a strike of coal miners in southern Alberta and south-eastern British Columbia, involving some 8,000 miners.

10.—Record of Strikes and Lockouts, 1901-1923.

Years.	Number of disputes.		Disputes in existence in the year.		
	In existence in the year.	Beginning in the year.	Employers involved.	Employees involved.	Time loss in working days.
1901.....	104	104	273	28,086	632,311
1902.....	121	121	420	12,264	120,940
1903.....	146	146	927	50,041	1,226,500
1904.....	99	99	575	16,482	265,004
1905.....	89	88	437	16,223	217,244
1906.....	141	141	1,015	26,050	359,797
1907.....	149	144	825	36,224	621,962
1908.....	68	65	175	25,293	708,285
1909.....	69	69	397	17,332	871,845
1910.....	84	82	1,335	21,280	718,635
1911.....	99	96	475	30,094	2,046,650
1912.....	150	148	989	40,511	1,099,208
1913.....	113	106	1,015	39,536	1,287,678
1914.....	44	40	205	8,678	430,054
1915.....	43	38	96	9,140	106,149
1916.....	75	74	271	21,157	208,277
1917.....	148	141	714	48,329	1,134,970
1918.....	196	191	766	68,489	763,341
1919.....	298	290	1,913	138,988	3,942,189
1920.....	285	272	1,273	52,150	886,754
1921.....	145	138	907	22,930	956,461
1922.....	85	70	569	41,050	1,975,276
1923.....	91	77	419	32,868	768,494
Total.....	2,842¹	2,740	15,991¹	803,195¹	21,348,024

these totals, figures for disputes extending over the end of a year are counted more than once.

The year 1923 was marked by the lowest figure for time loss in man-working-days since 1918, there being no strikes involving large numbers of employees for months, as was the case in 1922, 1919, 1917 and certain other years. The number of employees involved in strikes and lockouts was less than in 1922, but the number of disputes was slightly greater. The outstanding feature of the year was a strike of steel workers at Sydney, N.S., which caused sympathetic strikes of coal miners in Cape Breton island, in other parts of Nova Scotia, and for a short time, in a small area in Alberta. The sympathetic strikes resulted in a time loss of about 240,000 working days, nearly one-third of the total for the year.

An analysis of industrial disputes during 1923, by industries, is given in Table 11. In the mining group, the strikes of coal miners, in sympathy with the strike of workers in the iron, steel and products group, caused most of the time loss. In the printing group, the strike of job office compositors in about ten cities, which began in 1921 for the 44-hour week, was still on and caused considerable time loss. In the water transportation group, a strike of longshoremen in Vancouver caused most of the time loss.

11.—Strikes and Lockouts, by Industries, 1923.

Industries.	Disputes.		Number involved.	Time loss.	
	Number.	Per cent of total.	Em- ployees.	Working days.	Per cent of total.
Logging.....	3	3.3	525	10,473	1.4
Mining, non-ferrous smelting and quarrying.....	29	31.8	21,692	311,982	40.6
Manufacturing—					
Vegetable foods, drink and tobacco.....	2	2.2	187	1,788	0.2
Textiles.....	1	1.1	12	78	0.0
Clothing, knitted goods, garments, etc.....	6	6.6	332	10,068	1.3
Leather, fur and products.....	2	2.2	290	2,364	0.3
Pulp and paper.....	1	1.1	80	800	0.1
Printing and publishing.....	10	11.0	1,293	252,184	32.9
Saw and planing-mills.....	1	1.1	380	6,460	0.9
Wood products.....	1	1.1	220	1,287	0.1
Iron, steel and products.....	9	9.9	4,356	59,192	7.8
Stone industries.....	1	1.1	8	24	0.0
Construction—					
Buildings and structures.....	7	7.7	867	10,005	1.3
Railway construction.....	2	2.2	360	1,170	0.1
Miscellaneous construction.....	3	3.3	150	1,344	0.2
Transportation and public utilities—					
Street and electric railways.....	2	2.2	36	2,910	0.4
Water transportation.....	4	4.4	1,876	94,118	12.2
Storage and local transportation.....	2	2.2	107	753	0.1
Electric power plants.....	2	2.2	18	162	0.0
Service—					
Municipal.....	2	2.2	72	58	0.0
Personal.....	1	1.1	7	1,274	0.1
Total.....	91	100.0	32,868	768,494	100.0

The causes and results of the industrial disputes recorded during 1923 are given in Table 12. It is interesting to note that, apart from sympathetic strikes, the greatest number of working days was lost in strikes in the three categories including increased wages; about 49 p.c. of the total number of days lost was attributed to these causes. The number of employees affected (48 p.c. of the total) was also greatest in sympathetic strikes. Of the 91 strikes recorded during 1923, 21, involving 4,361 workers and a time loss of 20,263 working days, terminated in favour of the employees. Those settled in favour of the employers, 38 in number, affected 24,269 workers and involved a time loss of 459,550 working days, or 59.79 p.c. of the total number of days lost.

12.—Strikes and Lockouts, by Causes and Results, 1923.

Causes or objects.	In favour of employees.				In favour of employers.			
	Disputes.	Firms involved.	Employees affected.	Time loss in working days.	Disputes.	Firms involved.	Employees affected.	Time loss in working days.
For increased wages.....	7	11	621	2,964	9	62	1,469	29,644
For increased wages and shorter hours.....	1	4	21	3,205	-	-	-	-
For increased wages and other changes.....	2	8	75	1,036	2	23	4,155	134,415
For shorter hours.....	-	-	-	-	1	3	30	4,524
Against longer hours.....	1	1	7	1,274	-	-	-	-
Against discharge of employees.....	4	5	1,427	4,956	6	6	1,480	7,412
Against employment of particular persons.....	2	2	764	3,264	2	10	771	11,532
Against reduction in wages.....	1	1	196	784	3	3	93	3,552
For recognition of union.....	-	-	-	-	7	19	755	22,178
Against employment of non-unionists.....	-	-	-	-	-	-	-	-
Sympathetic.....	1	2	1,150	2,300	6	75	14,626	242,326
Unclassified.....	2	2	100	480	2	3	890	3,967
Total.....	21	36	4,361	20,263	38	204	24,269	459,550

Causes or objects.	Compromise.				Indefinite or untermi- nated.				Total.			
	Disputes.	Firms involved.	Employees affected.	Time loss in working days.	Disputes.	Firms involved.	Employees affected.	Time loss in working days.	Disputes.	Firms involved.	Employees affected.	Time loss in working days.
For increased wages.....	11	30	1,117	9,733	-	-	-	-	27	103	3,207	42,341
For increased wages and shorter hours.....	1	1	15	120	4	78	953	193,445	6	83	989	196,770
For increased wages and other changes.....	2	22	141	2,037	-	-	-	-	6	53	4,371	137,488
For shorter hours.....	-	-	-	-	2	37	89	15,414	3	40	119	19,938
Against longer hours.....	-	-	-	-	1	-	190	32,526	2	1	197	33,800
Against discharge of employees.....	1	1	250	5,250	1	1	21	21	12	13	3,178	17,639
Against employment of particular persons.....	-	-	-	-	1	1	25	2,520	5	13	1,560	17,316
Against reduction in wages.....	2	2	94	4,224	1	1	23	2,254	7	7	406	10,814
For recognition of union.....	-	-	-	-	3	3	207	15,471	10	22	962	37,649
Against employment of non-unionists.....	-	-	-	-	-	-	-	-	-	-	-	-
Sympathetic.....	-	-	-	-	1	1	10	3,070	8	78	15,786	247,696
Unclassified.....	1	1	1,103	2,596	-	-	-	-	5	6	2,093	7,043
Total.....	18	57	2,720	23,960	14	122	1,518	264,721	91	419	32,868	768,494

The greatest number of persons affected and of working time lost in any month of 1923 occurred in July, when 18,095 persons, or 55 p.c. of the total number of workers on strike, and a time loss of 307,433 working days, or 40 p.c. of the total, were involved. It was in this month that three strikes of coal miners in Nova Scotia, in sympathy with a strike of steel workers, affected a large number of employees and caused a severe time loss. In 1924, the greatest amount of time loss appeared in the months from April to September, owing to a strike of coal miners in Alberta. A considerable time loss in January was due chiefly to a strike of coal miners in Nova Scotia. A record of disputes by months since 1922 is given in Table 13.

13.—Strikes and Lockouts, by Months, 1922-1924.

Periods.	Disputes in Existence.			Number of Employees Affected.			Time Loss in Working Days.		
	1922.	1923.	1924.	1922.	1923.	1924.	1922.	1923.	1924.
January.....	22	18	13	3,435	2,852	14,227	68,474	53,966	198,932
February.....	24	20	16	3,200	3,950	12,433	62,935	46,030	191,858
March.....	20	19	13	2,569	1,533	827	62,737	33,229	11,087
April.....	26	27	15	13,086	2,561	9,286	272,946	34,972	214,793
May.....	31	39	13	13,433	4,767	8,548	279,857	53,891	218,765
June.....	25	28	24	11,093	6,268	14,165	263,402	42,406	245,857
July.....	21	23	17	15,553	18,095	9,374	255,734	307,433	230,834
August.....	25	20	17	25,364	3,651	10,349	450,692	30,721	227,288
September.....	23	18	9	17,736	1,729	8,549	99,732	30,775	205,754
October.....	18	16	6	3,240	2,322	8,656	54,758	50,402	141,448
November.....	14	15	—	2,036	2,237	—	48,023	55,978	—
December.....	15	13	—	2,950	2,446	—	55,986	28,693	—
Year.....	85¹	91¹	63¹	41,050¹	32,868¹	32,978¹	1,975,276	768,494	1,886,616

¹ These figures relate only to the actual number of disputes in existence and the employees involved during the year and are not a summation in each case of the monthly figures.

Table 14 is a record of industrial disputes during 1923, by methods of settlement. Thirty-six industrial disputes terminated as a result of negotiations between the parties in dispute; the number of employees involved in these 36 disputes was 6,590, or 20 p.c. of the total. Eight disputes were settled through conciliation or mediation, instituted in four cases by the Department of Labour, while five were terminated by arbitration. In 19 disputes, the employees returned to work on the employers' terms and in 9 strikes the strikers were replaced by other workers.

14.—Strikes and Lockouts, by Methods of Settlement, 1923.

Industry or occupation.	Negotiations between parties.		Conciliation or mediation.		Arbitration.	
	Number.	Em- ployees involved.	Number.	Em- ployees involved.	Number.	Em- ployees involved.
Logging.....	1	28	—	—	—	—
Mining, non-ferrous smelting and quarrying.....	14	4,234	3	660	3	1,181
Manufacturing—						
Vegetable foods, drink and tobacco..	1	135	—	—	—	—
Textiles.....	—	—	—	—	—	—
Clothing, knitted goods, garments, etc.....	1	128	—	—	—	—
Leather, fur and products.....	1	261	—	—	—	—
Pulp and paper.....	—	—	—	—	—	—
Printing and publishing.....	1	21	—	—	—	—
Saw and planing-mills.....	1	380	—	—	—	—
Wood products.....	1	220	—	—	—	—
Iron, steel and products.....	5	492	1	1,200	—	—
Stone industries.....	1	8	—	—	—	—
Construction—						
Buildings and structures.....	4	143	—	—	—	—
Railway construction.....	2	360	—	—	—	—
Miscellaneous construction.....	—	—	3	150	—	—
Transportation and public utilities—						
Street and electric railways.....	—	—	—	—	1	21
Water transportation.....	1	100	1	1,555	—	—
Storage and local transportation.....	1	30	—	—	—	—
Electric power plants.....	—	—	—	—	—	—
Service—						
Municipal.....	1	50	—	—	—	—
Personal.....	—	—	—	—	1	7
Total.....	36	6,590	8	3,505	5	1,209

14.—Strikes and Lockouts, by Methods of Settlement, 1923—concluded.

Industry or occupation.	Reference to Board under I.D.I. Act		Returned to work on employers' terms.		Replacement of strikers.		Otherwise (including indefinite or unterminated)		Total.	
	Num-ber.	Em- ployees involved	Num-ber.	Em- ployees involved	Num-ber.	Em- ployees involved	Num-ber.	Em- ployees involved	Num-ber.	Em- ployees involved
Logging.....	-	-	1	460	1	37	-	-	3	525
Mining, non-ferrous smelting and quarrying.....	-	-	6	15,221	-	-	3	456	29	21,692
Manufacturing—										
Vegetable foods, drink and tobacco.....	-	-	-	-	1	52	-	-	2	187
Textiles.....	-	-	1	12	-	-	-	-	1	12
Clothing, knitted goods, garments, etc.....	-	-	3	156	-	-	2	48	6	332
Leather, fur and products.....	-	-	1	29	-	-	-	-	2	290
Pulp and paper.....	-	-	1	80	-	-	-	-	1	80
Printing and publishing	-	-	-	-	1	30	8	1,242	10	1,293
Saw and planing-mills..	-	-	-	-	-	-	-	-	1	380
Wood products.....	-	-	-	-	-	-	-	-	1	220
Iron, steel and products	-	-	2	2,636	1	28	-	-	9	4,356
Stone industries.....	-	-	-	-	-	-	-	-	1	8
Construction—										
Buildings and structures.....	-	-	2	554	1	170	-	-	7	867
Railway construction...	-	-	-	-	-	-	-	-	2	360
Miscellaneous construction.....	-	-	-	-	-	-	-	-	3	150
Transportation and public utilities—										
Street and electric railways.....	-	-	-	-	-	-	1	15	2	36
Water transportation...	-	-	1	42	1	179	-	-	4	1,876
Storage and local transportation.....	-	-	1	77	-	-	-	-	2	107
Electric power plants...	-	-	-	-	2	18	-	-	2	18
Service—										
Municipal.....	-	-	-	-	1	22	-	-	2	72
Personal.....	-	-	-	-	-	-	-	-	1	7
Total.....	-	-	19	19,267	9	536	14	1,761	91	32,868

8.—Employment and Unemployment.

Employment Service of Canada.—Under sec. 3 of the Employment Offices Co-ordination Act (8-9 Geo. V, c. 21), an Act passed in May, 1918, to aid and encourage the organization and co-ordination of employment offices, the Minister of Labour is empowered,—

“(a) to aid and encourage the organization and co-ordination of employment offices and to promote uniformity of methods among them;

“(b) to establish one or more clearing houses for the interchange of information between employment offices concerning the transfer of labour and other matters;

“(c) to compile and distribute information received from employment offices and from other sources regarding prevailing conditions of employment.”

The Act further provides that certain sums of money are to be appropriated annually and paid to the provinces on a basis proportionate to the amount that each shall expend on the maintenance of employment offices. The amounts provided

for the various fiscal years were to be, for 1918-19, \$50,000; for 1919-20, \$100,000; for 1920-21, \$150,000; for each succeeding year, \$150,000. For some years these amounts were later increased by supplementary vote, but for the fiscal year 1924-25 no supplementary appropriation was made, and the payments to the provinces will therefore be on the basis originally provided in the Act.

The desired uniformity and co-ordination of employment office activities throughout the various provinces is obtained by having the payments contingent upon an agreement. This agreement, required under the Act, ensures that the provinces, in the conduct of their employment offices, shall endeavour to fill situations in all trades and occupations for both men and women and that no charge shall be made to employers or employees for this service. Each province agrees to maintain a provincial clearance system in co-operation with the interprovincial clearance system established by the Dominion Government, in order to secure the necessary mobility of labour as between localities in the same province or in different provinces. For the fiscal years 1923-24 and 1924-25, agreements were concluded with all of the provinces except Prince Edward Island. Thus is formed the Employment Service of Canada—a chain of employment offices reaching from Halifax to Vancouver. At the time the Act came into force, only twelve provincial employment offices operated in Canada. This number was steadily increased until, at the close of 1919, due to the impetus given by the Employment Offices Co-ordination Act, together with the requirements of the demobilization period, offices were functioning at 84 different centres. Subsequent contractions have reduced the Service to offices located at 66 centres (on Oct. 31, 1924) which are distributed among the various provinces as follows: Nova Scotia, 3; New Brunswick, 3; Quebec, 5; Ontario, 25; Manitoba, 3; Saskatchewan, 9; Alberta, 5; and British Columbia, 13.

An Order in Council issued in 1918 in pursuance of the Act provides for the formation of a body to be advisory to the Minister of Labour in the administration thereof. This body, known as the Employment Service Council of Canada, is composed of representatives of the Federal Departments of Labour and Soldiers' Civil Re-establishment, the Provincial Governments, the Canadian Manufacturers' Association, the Association of Canadian Building and Construction Industries, the Trades and Labour Congress of Canada, the Railway Association of Canada, the Railway Brotherhoods, the Canadian Lumbermen's Association, the Canadian Council of Agriculture and the Returned Soldiers. At the six annual meetings of the Council, the most recent of which was held on September 2-5, 1924, various recommendations and suggestions relative to employment office administration have been brought forward and presented to the Minister.

Employment statistics from the local offices are collected and tabulated by the Employment Service of Canada. Table 15 shows the positions available, applications for work and placements effected by the Service each year since March, 1919. These statistics show a gradual growth in the transactions of the employment offices from year to year as the reach of the Service becomes more widespread. The year 1920 was one of good trade conditions, and this, together with the efforts made by the Department in co-operation with the Department of Soldiers' Civil Re-establishment to find employment in industry for the returned soldiers, was responsible for the great volume of business noted during that year.

The number of men and women registering for work in Canada was largest in 1920 and 1923, respectively. Vacancies for both men and women were most numerous in 1920, with 1923 in second place. On the other hand, the placements effected in 1923 were greater than in 1920.

The year of most marked activity in employment service operations in Nova Scotia, Ontario and Saskatchewan was 1923. The Quebec offices in 1919 registered the largest aggregate of applications for work and vacancies notified, but the total of placements made was greatest in 1920. In Manitoba and Alberta, employment offices reported most business in 1920. In British Columbia, the largest number of men applied for work in 1920, and of women in 1923; the placements of men and women were also greatest during those years, while 1920 had the highest aggregate of vacancies notified.

During the months January-September 1924, applications for employment registered at the offices of the Employment Service of Canada totalled 391,128, of which 303,319 were from men and 87,809 from women. Employers notified the offices of 249,241 vacancies for men and 75,846 vacancies for women, a total of 325,087 opportunities for work. The Service effected 285,901 placements, 191,495 in regular employment and 94,406 in work expected to last less than one week. Of the placements in regular employment, 163,018 were of men and 28,477 of women.

During the year 1923 the number of applications for employment received at the offices of the various provinces was 589,175, of which 473,483 were of men and 115,692 of women. The number of vacancies notified by employers to the Service during the same period was 540,980, of which 431,576 were for men and 109,404 for women. The placements effected totalled 462,552; of these 347,165 were in regular employment, 310,598 being placements of men and 36,567 of women. The number of workers placed in casual employment totalled 115,387.

In order to facilitate the movement of labour in cases where there are not enough workers in any locality to fill the available vacancies, the Employment Service, by special arrangement with nearly all the members of the Canadian Passenger Association, has been granted the privilege of issuing certificates entitling bearers to railway fares at a reduced rate. This rate, 2·7 cents per mile for a second class ticket, is applicable only to persons who are being placed through the Employment Service in positions that are situated more than a stipulated minimum distance from the issuing employment office. During the calendar year 1923, such certificates were issued to 47,310 persons, of whom 28,942 proceeded to points within the same province as the despatching office, and 18,368 to points in other provinces. During the nine months ending September 30, 1924, 24,029 persons were assisted by the reduced rate, 12,482 of whom were travelling within the province, while 11,547 were accepting employment at points in other provinces.

15.—Applications for Employment, Positions Offered and Placements Effected by the Employment Service of Canada, by Provinces, 1919-1924.

Provinces.	Years.	Applications registered.		Vacancies notified.		Placements effected.	
		Men.	Women.	Men.	Women.	Men.	Women.
Nova Scotia.....	1919 (10 months)	9,323	726	6,929	990	5,198	391
	1920.....	6,241	525	2,665	692	2,269	174
	1921.....	11,448	1,413	4,763	1,208	4,271	648
	1922.....	12,204	2,976	7,707	2,647	6,706	1,961
	1923.....	12,180	3,138	9,767	2,897	9,267	2,407
	1924 (9 months)	5,713	2,237	5,231	2,253	4,210	1,901
New Brunswick.....	1919 (10 months)	14,329	239	12,643	334	9,957	161
	1920.....	9,495	473	8,388	513	6,846	310
	1921.....	5,423	884	3,902	870	3,611	601
	1922.....	7,905	2,019	6,693	1,817	6,101	1,365
	1923.....	9,440	2,997	9,270	3,159	8,142	2,576
	1924 (9 months)	4,807	2,496	4,246	2,502	3,861	2,253

15.—Applications for Employment, Positions Offered and Placements Effectuated by the Employment Service of Canada, by Provinces, 1919-1924—concluded.

Provinces.	Years.	Applications registered.		Vacancies notified.		Placements effected.	
		Men.	Women.	Men.	Women.	Men.	Women.
Quebec.....	1919 (10 months)	39,709	1,116	17,749	1,805	20,076	646
	1920.....	33,959	2,111	16,221	2,982	20,800	1,327
	1921.....	32,841	4,896	7,229	4,066	6,765	2,580
	1922.....	31,071	7,098	12,731	5,806	11,962	4,547
	1923.....	31,227	6,741	16,387	5,807	13,819	4,911
Ontario.....	1924 (9 months)	24,557	5,148	7,214	4,423	7,884	3,784
	1919 (10 months)	110,549	20,224	117,542	33,205	78,295	20,027
	1920.....	162,018	30,943	144,922	44,124	111,115	24,745
	1921.....	135,666	41,621	91,864	39,067	78,694	25,514
	1922.....	156,437	42,229	139,224	42,935	120,075	28,358
Manitoba.....	1923.....	164,492	51,588	162,907	47,007	132,069	34,371
	1924 (9 months)	122,048	40,241	103,597	31,394	93,436	23,689
	1919 (10 months)	56,496	13,830	76,023	18,198	52,566	12,930
	1920.....	67,770	27,960	88,282	31,913	62,908	25,657
	1921.....	57,262	27,041	56,728	28,419	45,049	23,767
Saskatchewan.....	1922.....	53,611	23,233	48,880	24,043	41,217	20,752
	1923.....	55,934	23,866	42,418	22,290	48,126	19,726
	1924 (9 months)	28,390	16,896	20,293	14,598	20,789	13,502
	1919 (10 months)	37,453	3,183	46,008	4,894	33,411	2,836
	1920.....	51,859	6,573	62,043	8,867	46,509	5,750
Alberta.....	1921.....	66,301	6,933	82,309	9,629	61,322	6,275
	1922.....	67,350	7,204	80,714	9,038	63,707	5,536
	1923.....	78,355	7,822	94,971	10,521	76,300	6,789
	1924 (9 months)	36,488	5,569	50,680	6,540	35,323	4,750
	1919 (10 months)	38,499	4,600	30,781	5,148	29,216	3,357
British Columbia.....	1920.....	66,737	16,942	63,393	18,046	53,246	14,821
	1921.....	58,570	13,435	48,777	14,358	43,582	11,338
	1922.....	43,935	8,586	36,330	9,902	32,235	7,780
	1923.....	55,346	8,283	53,352	8,781	46,056	6,984
	1924 (9 months)	32,408	6,989	29,070	6,916	26,454	5,914
Prince Edward Island..	1919 (10 months)	47,512	4,936	37,193	3,685	32,756	2,825
	1920.....	82,042	10,514	64,338	8,985	61,351	7,730
	1921.....	71,325	9,370	29,926	8,480	34,498	7,241
	1922.....	71,362	11,062	33,250	8,171	34,883	6,837
	1923.....	66,509	11,257	42,504	8,942	43,022	7,987
Canada.....	1924 (9 months)	48,908	8,233	28,910	7,220	32,054	6,112
	1919 (10 months)	1,721	8	1,020	4	1,282	5
	1920 (4 months)	614	13	274	20	248	6
	1919 (10 months)	355,591	48,862	345,888	68,263	262,757	43,148
	1920.....	480,735	96,054	450,526	116,142	365,292	80,520
	1921.....	438,836	105,593	325,498	106,097	277,792	77,964
	1922.....	443,875	104,407	365,529	104,359	316,386	77,136
	1923.....	473,483	115,692	431,576	109,404	376,801	85,751
	1924 (9 months)	303,319	87,809	249,241	75,846	223,991	61,910

1.—Unemployment as Reported by Trade Unions.

The general trend of unemployment, as reported by trade unions, was higher during 1924 than in the previous year. Unemployment, as used here, has reference to involuntary idleness due to economic causes. Persons engaged in work other than their own trades, or idle because of illness, or as a direct result of strikes or lockouts, are not considered as unemployed. As the number of unions making returns varies from month to month, with consequent variation in the membership upon which the percentage of unemployment is based, it should be understood that such figures have reference only to the organizations reporting. Table 16 is a monthly record of unemployment in trade unions by provinces, and shows that the situation was not as good in 1924 as in 1923, but that it was better than in 1922. The most favourable point reached during the year 1924, up to the end of September, was in April, when 5.1 p.c. of the members were reported as out of work. The highest percentage of unemployment was recorded in February, when 7.8 p.c. of the members were idle. In 1923 the peak of unemployment was in January.

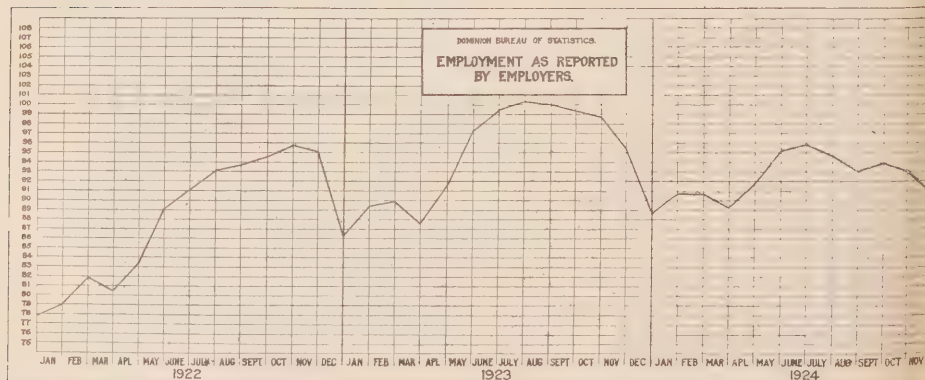
16.—Percentages of Unemployment in Trade Unions, by Provinces, 1915-1924.

Months.	Years.	Nova Scotia and P.E.I.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Canada.
December.....	1915	.2	.7	9.5	8.1	3.2	7.0	4.3	14.8	7.9
June.....	1916	.5	.9	1.8	1.7	1.2	2.6	3.0	5.8	2.1
December.....	1916	.3	.2	3.7	1.6	1.0	1.6	1.7	2.4	2.0
June.....	1917	.3	.2	2.5	.9	.6	.3	.8	1.8	1.2
December.....	1917	2.6	4.1	3.2	2.5	1.1	2.4	1.6	3.2	2.5
June.....	1918	.2	.3	.5	.4	.3	.2	.4	.9	.4
December.....	1918	2.0	.4	2.2	2.9	1.3	2.2	2.1	4.0	2.5
June.....	1919	2.7	2.4	4.0	1.8	1.2	2.5	1.7	3.4	2.6
December.....	1919	1.5	2.0	3.2	1.9	5.0	6.0	2.8	18.6	4.3
June.....	1920	.6	.4	3.1	1.6	1.4	2.2	1.2	5.8	2.1
December.....	1920	6.9	11.0	19.6	12.3	7.8	10.1	9.2	11.6	13.1
June.....	1921	14.3	11.7	20.7	6.7	8.0	6.8	9.4	24.4	13.2
December.....	1921	5.9	6.9	26.8	9.7	15.5	10.4	6.8	24.7	15.1
June.....	1922	7.2	3.5	5.4	3.9	6.7	5.0	7.1	7.1	5.3
December.....	1922	3.2	6.1	7.8	4.7	7.8	4.1	5.1	13.3	6.4
January.....	1923	3.4	5.0	6.0	6.7	12.8	5.7	8.5	16.6	7.8
February.....	1923	5.7	1.7	6.4	7.0	9.5	5.2	4.8	6.4	6.4
March.....	1923	3.0	1.4	7.3	5.5	8.5	5.0	7.6	14.0	6.8
April.....	1923	2.2	.5	4.9	2.8	8.3	3.7	11.9	5.4	4.6
May.....	1923	1.3	1.0	9.1	1.5	5.4	2.0	7.6	2.4	4.5
June.....	1923	2.2	1.0	5.7	1.6	5.6	1.3	4.5	4.0	3.4
July.....	1923	2.5	1.0	4.4	1.7	3.1	1.3	5.8	2.3	2.9
August.....	1923	.5	.4	2.2	2.2	3.4	1.0	3.6	2.0	2.2
September.....	1923	1.5	1.7	2.3	2.1	.8	1.1	1.9	2.4	2.0
October.....	1923	4.3	3.2	9.5	2.8	2.2	1.8	3.1	3.1	4.8
November.....	1923	2.4	3.9	12.0	4.2	3.2	3.2	6.5	3.7	6.2
December.....	1923	7.3	3.6	9.7	6.4	6.5	4.2	6.0	7.1	7.2
January.....	1924	9.5	3.0	9.0	7.5	7.3	5.3	5.3	6.4	7.5
February.....	1924	3.1	2.7	7.9	9.1	8.0	4.8	7.6	8.1	7.8
March.....	1924	3.6	3.6	8.7	7.0	7.4	6.5	5.3	3.2	6.7
April.....	1924	2.2	4.5	6.3	5.4	7.2	5.2	4.1	2.2	5.1
May.....	1924	1.6	3.2	13.7	5.8	6.1	1.6	4.7	3.6	7.3
June.....	1924	6.4	5.2	9.4	4.9	4.9	2.3	3.7	2.2	5.8
July.....	1924	2.6	3.6	7.8	4.6	5.7	5.5	3.8	3.8	5.4
August.....	1924	9.2	3.1	8.9	5.8	4.4	4.4	5.7	4.7	6.5
September.....	1924	9.3	2.9	7.6	5.1	7.2	4.0	4.7	4.3	5.9

NOTE.—For the percentages of unemployment for 12 months in 1921 and 1922, see page 732 of the 1922-23 Year Book.

2.—Employment as reported by Employers.

The Dominion Bureau of Statistics tabulates payroll data on employment from employers of 15 hands and over; between 5,000 and 6,000 of these firms, representing practically every industry except agriculture and the more specialized business and professional callings, make monthly returns covering, in 1924, an average working force of about 764,000 persons. The trend of employment during the past three years is shown on the accompanying chart.



The chart on page 688 depicts the course of employment since 1921. This shows that the depression of 1921 was followed by the gradual recovery of 1922 and the more pronounced revival of 1923. In the early months of 1924 the curve was above the level of the same period of 1923, but employment increased in succeeding months at a slower rate than it had done in the preceding year, and the improvement was not extensive enough to keep the curve above the 1923 level.

Spring and summer expansion in employment was recorded in 1924 only from April 1 to July 1, when the peak index of 95.9 was reached; this was followed by declines in the next two months. At the beginning of October a brief and partial recovery was indicated, but seasonal contractions in the outdoor industries soon caused a resumption of the unfavourable movement.

Table 17 gives the index numbers of employment by industrial groups since 1921. Manufacturing, mining, transportation and construction did not show as favourable a situation in 1924 as in 1923, while in logging, communication and services, employment was on a higher level and in trade was practically the same.

17.—Index Numbers of Employment as reported by Employers, by Industries, as at the first of each month, January, 1921, to December, 1924.

Years and Months.	Manu- facturing.	Logging.	Mining.	Communi- cation.	Transpor- tation.	Construc- tion and Main- tenance.	Services.	Trade.	All Indus- tries.
1921.									
Jan. 1.	78.4	88.6	100.3	105.4	103.0	102.9	94.5	100.4	87.7
Feb. 1.	84.8	94.3	95.8	104.6	101.3	100.1	94.2	92.5	90.1
Mar. 1.	84.6	81.8	92.8	104.1	95.8	89.2	96.3	92.0	88.0
April 1.	80.7	44.5	88.0	101.8	95.5	86.7	97.8	92.5	84.1
May 1.	80.2	49.9	86.9	103.1	94.0	92.7	98.3	94.2	84.1
June 1.	81.1	47.3	88.7	106.1	98.1	111.9	103.8	92.5	86.6
July 1.	80.9	35.4	92.2	107.4	99.6	126.7	108.0	92.7	87.5
Aug. 1.	81.3	32.3	91.0	107.1	102.7	144.6	107.7	91.4	88.9
Sept. 1.	79.3	41.9	96.0	106.8	106.6	141.6	107.3	92.1	88.7
Oct. 1.	81.3	48.1	96.4	105.1	109.6	142.5	104.5	92.4	90.2
Nov. 1.	81.1	59.7	98.1	104.5	110.5	139.3	96.0	93.0	90.2
Dec. 1.	79.3	61.2	98.0	103.8	106.9	113.2	93.4	96.3	87.2
1922.									
Jan. 1.	68.7	59.5	93.0	101.1	99.2	92.4	92.9	96.9	77.9
Feb. 1.	73.0	61.5	89.7	95.7	97.0	79.8	91.7	90.3	78.9
Mar. 1.	78.1	54.8	90.3	97.5	97.1	83.7	93.0	88.2	81.9
April 1.	78.0	27.2	88.9	98.2	96.8	81.4	94.6	88.6	80.6
May 1.	79.0	37.0	90.2	100.4	98.7	101.1	95.6	90.1	83.3
June 1.	84.2	37.5	92.6	100.6	106.2	129.5	100.3	90.0	89.2
July 1.	84.2	31.4	94.4	100.6	109.2	157.4	104.4	90.7	91.1
Aug. 1.	85.8	27.9	96.2	103.1	111.6	169.4	104.7	90.1	93.1
Sept. 1.	86.5	36.5	97.1	103.4	111.9	164.3	105.0	90.8	93.7
Oct. 1.	86.7	42.1	101.1	102.8	114.0	166.2	102.0	91.9	94.6
Nov. 1.	87.7	66.0	104.5	102.2	114.7	153.2	96.6	93.8	95.8
Dec. 1.	87.7	84.7	102.8	101.5	115.3	122.6	95.8	97.0	95.1

17.—Index Numbers of Employment as reported by Employers, by Industries, as at the first of each month, January, 1921 to December, 1924—concluded.

Years and Months.	Manu- facturin-.	Logging.	Mining.	Communi- cation.	Transportation.	Construction and Main- tenance.	Services.	Trade.	All Industries.
1923.									
Jan. 1.	78.1	87.0	100.8	97.4	104.8	96.0	92.8	98.2	86.3
Feb. 1.	85.0	95.1	101.3	96.5	101.5	86.0	92.4	93.7	89.5
Mar. 1.	87.5	88.8	98.6	97.4	99.8	83.8	93.4	88.9	89.9
April 1.	85.6	57.8	97.0	98.0	100.2	85.2	94.9	90.2	87.6
May 1.	90.5	48.0	96.7	99.7	101.7	101.6	97.1	91.7	91.4
June 1.	93.5	52.5	101.6	102.2	109.0	140.2	108.8	91.9	97.3
July 1.	93.6	48.4	101.6	103.4	112.2	169.1	115.1	92.3	99.5
Aug. 1.	93.5	42.2	101.0	105.2	113.4	183.7	118.7	91.7	100.2
Sept. 1.	93.0	43.1	104.0	106.4	113.4	180.9	120.3	92.0	100.0
Oct. 1.	91.8	51.7	104.9	106.6	116.2	171.8	113.7	93.2	99.5
Nov. 1.	91.2	62.6	105.4	105.3	116.8	159.3	108.5	93.1	98.8
Dec. 1.	88.2	82.2	105.9	106.1	113.8	125.2	106.2	96.8	95.7
1924.									
Jan. 1.	80.1	92.1	100.5	104.2	107.3	98.8	106.6	99.4	88.7
Feb. 1.	84.9	97.0	104.0	104.0	103.7	94.2	106.3	91.2	90.6
Mar. 1.	86.0	90.8	99.7	105.4	103.1	93.1	106.2	91.2	90.7
April 1.	86.5	54.2	99.5	106.0	103.7	91.4	107.9	91.0	89.3
May 1.	87.7	54.5	103.3	108.2	105.3	111.2	108.0	91.9	91.8
June 1.	88.4	53.6	103.7	109.8	110.1	147.3	113.8	92.5	95.2
July 1.	87.7	43.1	99.9	111.7	110.0	175.8	122.5	92.1	95.9
Aug. 1.	86.2	36.2	99.4	113.9	110.8	173.1	122.4	91.7	94.7
Sept. 1.	84.5	43.7	99.1	113.1	107.8	165.3	121.7	92.1	93.1
Oct. 1.	85.7	53.4	99.0	111.2	109.0	157.5	115.0	93.1	93.9
Nov. 1.	84.2	71.8	100.5	111.3	108.2	144.9	109.3	93.8	93.0
Dec. 1.	82.0	85.1	99.2	109.3	108.2	116.6	107.2	99.1	90.8

NOTE.—Number of employees of the reporting firms in January, 1920, is taken as 100 in every case.

9.—Child Labour Laws.

For several centuries the employment of children has been a subject of much legislation in Great Britain, but in the earlier part of this period the object of the legislators was to keep children fully employed, since idleness was regarded as one of the greatest existing evils, particularly in its connection with pauperism. A law of 1547, in dealing with vagrants, provided that their children who were between the ages of 5 and 14 years should be bound out as apprentices, while the Statute of Apprentices of 1562 decreed that children of working parents should ordinarily begin work not later than the age of 12. The period of apprenticeship for boys lasted until they were 24 years and for the girls until 21 years, or until marriage.

The coming of the Industrial Revolution towards the close of the 18th century very materially changed the conditions under which young persons, as well as adults, were employed; children who formerly worked in their own homes or as apprentices in those of their masters, were now employed on mechanical processes in factories. In these factories, often ill-adapted for human occupation, the labour was unremitting and physically exacting, and the children's opportunities of learning a trade to provide for their future were practically non-existent.

The new conditions were met by new legislation, but not before much hardship had been endured by the child earners, many of whom were daily working long hours at an age when they are now generally considered too young even to attend school. The movement for the regulation of child labour in factories dates from the early part of the 19th century, the first Act of this kind being passed in 1802; this, however, aimed only at improving the condition of apprentices in cotton mills. It was not until seventeen years later that an Act was passed regulating the employment of children other than apprentices. The Factory Act of 1833, as well as other Acts, both before and after that year, contained further legislation correcting the worst abuses under which child earners laboured in factories, while an Act passed in 1842 was a first attempt to protect children employed in mines.

Constant improvement in working conditions for children has been effected from decade to decade in Great Britain. The latest outstanding legislation was the Fisher Education Act of 1918, which contained many important restrictions on the employment of children, as well as providing stringent school attendance laws.

Child Labour in Canada.—Industrial conditions in the earlier history of Canada did not call for child labour regulation. The children of early settlers were pressed into the hard service that life in pioneer days demanded from all hands, and it is not likely that the old idea of the sinfulness of so-called idleness was disregarded in the treatment of the young. But, as in the early days of apprenticeship in England, children were mainly employed in and about the homes and farms, where the work, though strenuous, was not attended by the wholesale evils that later inflicted so much suffering upon employees in unregulated factories.

With the gradual extension of the factory system in this country, however, the need for protective legislation developed, and a series of provincial laws and regulations has grown up to govern the employment of children. These laws, based largely upon British legislation, are constantly being extended with the spread of industry in the various provinces. It is gratifying to note that, on the whole, the Canadian standard of child labour protection is higher than is recommended in the draft conventions and recommendations of the International Labour Conference.

Most of the laws relating to child earners are contained in provincial Acts regulating labour in factories, shops, offices and mines. Besides the laws which expressly limit or regulate child labour, the provincial School Acts are an important factor in the protection of children, since regular employment is impossible for those of the ages of compulsory school attendance. The connection between school and labour laws is particularly evident in the use of employment certificates, based on educational tests, which are a condition of the employment of young persons in Quebec and Ontario.

Table 18 is a comparative statement of the laws regulating child labour in the various provinces, and is based on data compiled by the Department of Labour and the Canadian Council of Child Welfare.

18.—Child Labour Laws of Canada

Regulations respecting	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
Compulsory school attendance.	From 7 to 13 years for 30 weeks if residing in Charlottetown or Summerside, otherwise 20 weeks.	From 6 to 16 years in cities and towns, except for child over 12 years, who has passed Grade VII, or any child over 13 years who has been granted an employment certificate by Board of School Commissioners. In sections other than cities and towns school age is 7 to 14 years, but these limits may be extended to urban limits by vote.	From 6 to 16 in certain urban districts; exceptions provide that any child over 12 years, who has passed Grade VII, and any other over 13 years who has attended 60 days out of 120 for 14 consecutive weeks in the preceding year, may work if necessity requires. Elsewhere children must attend school from 7 to 12 years for 60 p.c. of teaching days.	Has no compulsory school attendance law.	From 8 to 14 years, exemption may be granted for 6 weeks only in each term by attendance officer, on proof that child's services are required in urgent or necessary household duties or for maintenance of himself or dependant. Children between 14 and 16 years generally must attend full time classes; those whom necessity compels to work may not be employed without a work permit, and must attend part-time classes for 400 hours a year.
Education-requirements for children entering employment.	—	Boys under 16 working in mines must produce school certificate. Any child over 13 years who satisfies school commissioners that it is necessary for him to work, may be granted an employment certificate to be absent from school while engaged in remunerative employment.	The employment of any child under 16 years in cities and towns is prohibited during school hours unless the child holds a school certificate with standing equal to Grade VII.	Children under 16 must be able to write and read fluently before being employed; if children without this qualification attend night school regularly they may be authorized to follow or continue their occupation.	Children under 14 employed in shops during school hours must possess school certificates. Those between 14 and 16 years of age employed between 8 a.m. and 5 p.m. must have home permit or employment certificate, and must attend, when possible, part-time classes for at least 400 hours a year.
Physical examination of children entering employment.	—	Any child over 13 years, who satisfies the School Commissioners that it is necessary for him to work, must obtain from a competent physician a certificate of physical fitness for the employment he is entering, in addition to obtaining an employment certificate.	—	May be required for boys and girls under 14 years employed in industrial establishments.	—

in Force during 1924.

Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.
From 7 to 14 years, this may be raised to 15 years by any school board having an attendance officer passing a by-law. Exemption for period not exceeding 6 weeks in term may be granted by competent authority to any child over 12 years whose services are required in husbandry or urgent and necessary household duties. Attendance required from 14 to 16 years of age if child is not employed in industrial or household duties.	From 7 to 15 years, unless child must maintain himself or dependant, or has some other valid excuse or has passed Grade VIII. A child over 13 years who has passed Grade V and whose services are required in husbandry or necessary household duties may be exempted from school attendance for a period not exceeding 30 school days in any year.	From 7 to 15 years, unless child has passed Grade VIII. Exemption may be granted for child whose services are required in husbandry or urgent or necessary household duties, or for his own maintenance or the maintenance of a dependant, upon production of certificate from competent authority. This exemption may not exceed 6 weeks in a term.	From 7 to 15 years inclusive. Children must attend full time during school year.	From 7 to 12 years, except with valid excuse.
Boys between 13 and 14 years must possess a school certificate, and a certificate from the Bureau of Labour permitting such employment, in order to be employed in shops regularly.	Where the services of any child over 13 years, who has passed Grade V, are required in husbandry or other necessary duties, he may be granted exemption from school for a period not exceeding 30 days in a year.	Boys between 14 and 16 years working in mines above ground must be able to read and write, be familiar with the rules of arithmetic and furnish a certificate to that effect from a qualified teacher, teaching in the province.	—	Boys between 12 and 16 years must possess a school certificate before being employed in mines.
The Superintendent of Neglected Children must be satisfied that any boy between 12 and 16 years applying for license to carry on street trade, is of normal development physically and able to undertake the work. The Bureau of Labour must be satisfied that employments for which certificates are granted to boys between 13 and 14 years will not be harmful to them.	—	—	—	—

18.—Child Labour Laws of Canada

Regulations respecting	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
Minimum age for work in factories, shops and office buildings.	—	In factories, 14 years; every employer of children under 16 years must obtain their birth certificates. From July to October, inclusive, children under 14 years may be employed in gathering or preparing fruits, etc., for canning. In breweries the minimum age is 16 years.	In mechanical, manufacturing or mercantile establishments, 13 years. No person under 14 may be employed in the management or control of any elevator. Employment of boys or girls under 16 years is prohibited in breweries or shops, saloons, taverns or other places where intoxicating liquors are made, bottled or sold.	In ordinary industrial establishments, 14 years; in industries classified as dangerous and unwholesome, the minimum age is 16 for boys and 18 for girls. The employment of children under 16 who are unable to read and write fluently is forbidden. No person under 18 years may act as bartender in any licensed establishment.	In factories, 14 years; where work is deemed dangerous or unwholesome minimum is 16 for boys and 18 for girls. In shops, 12 years, but no child under 14 may be employed in any shop during school hours without a certificate under the Truancy Act. No persons under 16 may drive or operate motor vehicles; persons between 16 and 18 must be licensed to drive motors on highways. No person under 18 may regularly operate or control an elevator.
Minimum age for work in mines.	—	In or about coal mines, 16 years for boys; in metalliferous mines, below or above ground, 12 years. Boys between 12 and 16 years must have satisfactorily completed Grade VII before they may be employed in metal mines. No person under 18 may have charge of any part of passenger-hoisting machinery except where the machinery is worked by an animal whose driver is over 14 years, in which case the person having direction over this driver is deemed to be in charge of the machinery.	—	In the underground works of any mine or quarry, 15 years for boys; no woman or girl may be employed in the working of any mine. No male person under 20 may have charge of passenger-hoisting machinery nor under 18 have charge of hoisting, hauling, drilling, or blasting machinery. The transmission of signals and orders for putting such machines in motion may not be entrusted to persons under the full age of 16.	In or about any mine, 16 years for boys; below ground, 18 years. No woman or girl may be employed in or about any mine except in clerical work. No person under 18 may have charge of any hoisting machinery and in passenger-hoisting machinery minimum age is 20 years, with at least one month's experience.

in Force during 1924—con.

Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.
<p>In factories, 14 years for boys and 15 for girls. Employers of persons under 16 must obtain and produce on demand, proof of their birth. Employment of girls under 18 and boys under 16 may be prohibited in factories where the work is deemed dangerous or unwholesome. Children under 14 employed in bake-shops must have written consent of inspector. The employment of children under 14 in shops is prohibited, except that boys between 13 and 14 may be so employed for not more than 2 hours on school days and not more than 8 hours on school holidays, if they have certificates under the School Attendance Act and from the Bureau of Labour permitting such work. Persons under 18 may not operate passenger elevators anywhere in the province.</p>	<p>In any factory, 14 years for boys and 15 for girls; where work is deemed dangerous or unwholesome employment of boys under 16 and of girls under 18 may be prohibited. Children over 10 must be licensed to perform in public for profit; such performance is forbidden for children under 10. No person under 16 may operate a passenger elevator. No person under 18 may be granted a chauffeur's license, but a person between 16 and 18 may be so licensed if he proves in a special examination that he is skilled and capable.</p>	<p>In any factory, shop, office or office building, including any bake-shop, in centres of over 5,000 population, 15 years; this minimum applies to all factories in the province. No person under 16 may drive or operate a motor vehicle on any highway. No person under 18 may be employed in or about a billiard room.</p>	<p>No child under 15 years may be employed in any manufacturing establishment, except in canneries during the fish runs and in the fruit seasons; in factories where the work is deemed dangerous or unwholesome, minimum age is 16 for boys and 18 for girls. No child under 14 may be employed in any bake-shop, nor boy under 14 in construction or other industrial undertaking. Employers in industrial undertakings must keep a register of all their employees under 16, and their birth dates.</p>	<p>—</p>
<p>—</p>	<p>In mines, 14 years for boys; no woman or girl may be employed in the working of a mine. No person under 18 may have charge of passenger - hoisting machinery.</p>	<p>Above ground in any mine, 14 years for boys; below ground, 16 years. No woman or girl may be employed in or about a mine, except in an office. Boys between 14 and 16 years working above ground must have certain educational qualifications. No person under 18 may have charge of machinery used for hoisting persons, except where such machinery is worked by an animal whose driver is over 16, in which case the person having direction over such driver is deemed to be in charge of the machinery.</p>	<p>In coal mines, 14 years for boys in surface workings, and 15 below ground; no woman or girl may be employed in the working of any mine. No boy under 16 may operate hoisting or moving machinery, nor may those under 22 operate passenger elevators. In metalliferous mines, no boy under 14 may work below ground, nor may those under 18 have charge of passenger elevators. Mine authorities must keep registers of the names and ages of the boys they employ; in metalliferous mines, record must be kept of their residence and date of first employment.</p>	<p>In any mine, above or below ground, 12 years for boys; those between 12 and 16 must have certificates from teachers of their ability to read, write and do simple arithmetic.</p>

18.—Child Labour Laws of Canada

Regulations respecting	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
Hours per day for working children.	—	Children under 16, including those under 14 who work during canning season, may not be employed in factories more than 8 hours a day and 4 on Saturdays. Girls under 18 may not be employed for more than 9 hours a day; exceptions, not exceeding 36 days a year, allow a working day of 12½ hours, with 45 minutes for supper. Boys under 14 and girls under 16 may not be employed in shops more than 8 hours a day and 4 on Saturdays. Boys 12 to 16 years employed below or above ground in mines may not work more than 10 hours, except in accidents or emergencies.	Girls between 14 and 18 may not work longer than 10 hours a day in factories, unless a different apportionment of hours is made to secure a shorter day's work on Saturday, except in emergencies, etc. when they may work 13½ hours a day for not more than 36 days in 12 months. When girls are employed after 7 p.m., they must be allowed one hour for meals between 5 and 8 p.m.	No person under 18 years may be employed in a factory of any sort for more than 10 hours in one day; in emergencies the inspector may extend the working hours of young persons to 12 hours a day, with an allowance of 30 minutes for evening meal to those working after 6 p.m.	No workmen may work more than 8 hours per day in any mine. No boy under 16, girl under 18 nor woman may be employed for more than 10 hours a day, unless a different apportionment is made to give a shorter day's work on one day in week. Exemption may be allowed by inspector for such persons to work 12½ hours a day for not more than 36 days a year. Forty-five minutes for supper must be allowed those working after 7 p.m.
Hours per week for working children.	—	Children under 16 may not be employed more than 44 hours a week and girls under 18 more than 54 hours a week; in exceptions, girls in factories may not be employed more than 72½ hours a week for more than 36 days in 12 months. No boy between 12 and 16 may be employed in any mine more than 54 hours a week.	Girls between 14 and 18 years may not be employed in factories for more than 60 hours a week; in emergencies girls may work not more than 81 hours a week, for a period not longer than 36 days in 12 months.	Boys and girls under 18 may not be employed in any factory or workshop for more than 60 hours a week; in cotton and woolen factories women and young persons may not be employed more than 55 hours a week. In emergencies, boys and girls less than 18 may be permitted by the inspector to work 72 hours a week for a period not exceeding 6 weeks. Boys between 15 and 17 years may not be employed underground in any mine for more than 48 hours a week.	Boys under 16 and girls under 18 may not be employed in any factory or store for more than 60 hours a week; in emergencies they may work 71½ hours a week for not more than 36 days in 12 months.

In Force during 1924—con.

Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.
<p>Boys 14 to 17 and girls 15 to 18 may not work in factories more than 9 hours a day, unless a different apportionment is made to shorten hours on Saturday; in emergencies, etc., inspector may allow girls to work 12 hours a day for not more than 36 days a year, when 45 minutes must be allowed for supper between 5 and 8 p.m. No bake-shop employee may work longer than 12 hours a day. In shops, boys 14 to 17 and girls 14 to 18 may not be employed more than 14 hours a day, nor 60 hours a week. Exceptions allow a 70 hour week for those over 16. Boys 13 to 14 may work in shops on school days for 2 hours daily and on school holidays for 8 hours, if they have the necessary certificates.</p>	<p>Boys between 14 and 16 and girls between 15 and 18 years may not be employed in any factory for more than 48 hours a week, and the working hours in any one day may not be later than 6.30 p.m., except by special permit. Exemptions in emergencies allow a working day of 12½ hours for not more than 36 days a year, when not less than 45 minutes for supper must be given to those working after 7 p.m. between 5 and 8 p.m.</p>	<p>Under the Minimum Wage Act, 48 hours a week for persons under 18 and women, except in stores, but the board may extend these hours during pressure of seasonal work. Except in emergencies, women may not be employed earlier than 7 a.m., nor later than 6 p.m. When persons are working later than 7 p.m., 45 minutes must be allowed for evening meal.</p>	<p>Girls 15 to 18 may not be employed in factories for more than 8 hours a day, nor more than 48 hours a week, unless a different apportionment is made to give a shorter work day on Saturday; exceptions provide that such girls may work not more than 9 hours a day for not more than 36 days in 12 months in emergencies. A boy or girl under 16 may not be employed in shops for more than 11 hours and on Saturday for more than 13 hours, including meal times. Not less than 45 minutes must be allowed for evening meal between 5 and 8 p.m. No person may be employed longer than 12 hours a day in bake-shops.</p>	<p>—</p>
<p>Minimum Wage Act governs employment of most women and girls; hours allowed vary from 48 per week in most factories to 52 in laundries. In shops maximum is 49 hours, but in 5, 10 and 15c. stores it is 53; in offices it is 44 hours. Factories Act prohibits employment in stores of boys 14 to 17 and girls 15 to 18 for over 54 hours a week; exceptions allow girls over 17 to work 58 hours a week for not more than 36 days in 12 months. Boys 13 to 14 licensed to work in shops may not work more than 48 hours a week. Boys 14 to 17 and girls 14 to 18 may not be employed in shops more than 60 hours a week, unless in outdoor work, such as delivering, when maximum is 66 hours.</p>	<p>Boys under 16, girls and women may not be employed more than 48 hours a week; in emergencies, the hours of labour allowed may not exceed 72½ a week for not more than 36 days a year.</p>	<p>The Minimum Wage Act decrees a 48 hour week for young persons and women, but the board may extend these hours under pressure of seasonal work.</p>	<p>Girls between 15 and 18 years may not be employed in factories for more than 48 hours a week, except in accidents or emergencies, when they may be employed 54 hours a week for a period of not more than 36 days in 12 months. Boys or girls under 16 may not be employed in or about a shop for more than 66½ hours, including meal-time, in any one week. No person may be employed in any bake-shop for more than 60 hours a week, without written permission of inspector.</p>	<p>No boy between 12 and 16 years of age may be employed in or about any mine for longer than 48 hours a week, except in case of accident or emergency.</p>

18.—Child Labour Laws of Canada

Regulations respecting	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
Prohibited hours of nightwork for children.	—	Girls under 18 may not in any circumstances be employed in factories between 9 p.m. and 6 a.m.	Girls and women may not in any circumstances be employed in factories between the hours of 10.30 p.m. and 6 a.m.	Boys under 18, girls and women may not work between the hours of 9 p.m. and 6 a.m. in any industrial undertakings; children under 16 years may not engage in any street trade after 8 p.m.	Boys under 16 and girls under 18 may not be employed in any factory between 6.30 p.m. and 7 a.m.; in emergencies such persons may not be employed between 9 p.m. and 6 a.m. In shops, boys under 16, girls and women may not be employed between 6 p.m. and 7 a.m. except on Saturdays, the day before a statutory holiday and 10 days before Christmas, when they may be employed between 7 a.m. and 10 p.m. No child under 16 may engage in any street trade or occupation between 10 p.m. and 6 a.m.
Prohibited child labour.	—	The employment of boys under 16 and girls under 18 in factories where the work is deemed dangerous or unwholesome may be prohibited by Order in Council. Young girls may not clean mill gearing nor work between the fixed and traversing parts of self-acting machines, while such machinery is in motion. No boy under 12 may be employed above or below ground in any metalliferous mine, nor under 16, below ground in any coal mine. Children may not be employed in breweries or saloons or other places where intoxicating liquors are made, bottled or sold.	The Workmen's Compensation Board may prohibit the employment of boys under 14 and girls under 18 in factories where the work is deemed dangerous or unwholesome. No employee may clean mill gearing, and no female person may work between the fixed and traversing parts of self-acting machines, while such machinery is in motion. No child under 14 may be employed in the management or control of any elevator. Children under 16 may not be employed in breweries, saloons or other places where intoxicating liquors are made, bottled or sold.	Boys under 16 and girls under 18 may not be employed in factories classified as dangerous, unwholesome or incommodious; women, girls and boys are forbidden to do any operation connected with belting or other modes of transmission. No girl or woman may be employed in the workings of a mine. Boys under 15 may not work under ground in any mine or quarry, nor may boys under 20 be employed in working machinery in or near mines, except machinery put in motion by animals, in which case their drivers may not be younger than 16.	Boys under 16 and girls under 18 may not be employed in factories where work is deemed dangerous or unwholesome. Boys under 16 and females may not clean mill gearing, nor may girls under 18 work between the fixed and traversing parts of self-acting machinery while it is in motion. Persons under 18 may not operate elevators in factories, shops or offices. Boys under 16 and females may not be employed in mines; boys under 18 may not work underground nor have charge of any hoisting apparatus. Boys under 20 may not have charge of passenger elevators in mines. No one under 16 may drive motors; persons 16 to 18 so employed must be licensed as chauffeurs. Females without permits may not be employed in camps where they must reside. Boys under 12 and girls under 16 may not engage in street trades.

in Force during 1924—con.

Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.
No person under 18 years may be employed habitually between 9 p.m. and 6 a.m. Even in emergencies, no girl nor woman may be employed in any factory before 7 a.m. or later than 10 p.m. Young persons may be employed in shops between 8 a.m. and 10 p.m. on the day before a statutory holiday and for 10 days before Christmas.	Boys under 16 and girls under 18 may not be employed habitually in any factory later than 6.30 p.m.; in emergencies such persons may not be employed before 7 a.m., nor after 10 p.m. Children under 16 may not be employed anywhere between 10 p.m. and 6 a.m. Children licensed to engage in street trades may not be so employed after the hour of 8 p.m. in December, January and February, nor later than 9 p.m. in other months. Public performing is prohibited between 10 p.m. and 6 a.m.	Female persons over 15 may not be employed in any factory, shop, office or office building between the hours of 11 p.m. and 7 a.m. except by written permission of inspector. No child under 18 licensed to engage in street trades may be so employed after 8 p.m. in December, January and February, or after 9 p.m. throughout the rest of the year.	No women or young girls may be employed in factories between 8 p.m. and 7 a.m. No person under 18 may be employed in any bake-shop between 9 p.m. and 5 a.m.	—
The employment of boys under 16 and girls under 18 may be prohibited in factories where the work is deemed dangerous or unwholesome. Girls under 18 may not clean mill gearing or any part of machinery, nor may they work between the fixed and traversing parts of any self-acting machine while such machinery is in motion. No girl may be licensed to engage in any street trade. No person under 16 may be employed to operate a passenger elevator.	The employment of boys under 16 and girls under 18 may be prohibited in factories where the work is deemed dangerous or unwholesome. Girls under 18 may not clean mill gearing or any part of machinery, nor may they work between the fixed and traversing parts of any self-acting machine while such machinery is in motion. No persons under 16 may operate passenger elevators. No boy under 14, girl or woman may be employed in a mine; nor may boys under 18 have charge of passenger hoisting machinery in mines. No boy under 12, or girl may be licensed to engage in street trades, as boot-blacks or express or despatch messengers. Children under 16 must be licensed to perform in public for profit.	Women and girls may not clean mill gearing in factories while the machinery is in motion. No boy under 16 may work below ground in mines and women and girls may not be employed in mines except in offices. Persons under 18 may not be employed in or about billiard rooms for any purpose connected with the business thereof.	The employment of boys under 16 and girls under 18 may be prohibited in factories where the work is deemed dangerous or unwholesome. Girls may not clean mill gearing, nor any part of machinery, nor work between the fixed and traversing parts of self-acting machines, while the machinery is in motion. No boy under 15, woman or girl may be employed in any mine, except in clerical or domestic work; no male person under 22 may operate passenger - hoisting machinery in mines, while material-hoisting machinery may be operated by boys of 16 years.	—

18.—Child Labour Laws of Canada

Regulations respecting	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
Child labour in street trades.	—	No child under 16 may engage in any street trade during school hours unless he has a certificate signed by a competent authority that he possesses certain educational qualifications.	—	Children under 16 may not sell papers or trade in any street or public place, unless they can write and read fluently and possess certificates of study; such street occupations may not be carried on after 8 p.m.	No child under 16 years may engage in any street trade or occupation between 10 p.m. and 6 a.m. No license to engage in public performing may be issued by the head of the council of a municipality to a child under 10 years.

II.—WAGES.

Statistics of rates of wages and hours of labour have been collected and published for recent years by the Department of Labour in a series of bulletins supplementary to the Labour Gazette. Report No. 1 of this series was issued in March, 1921. The records upon which the statistics are based begin in most cases with the year 1901. Index numbers have been calculated to show the general movement of wage rates; 21 classes of labour are covered in this series back to 1901, 4 classes of coal miners back to 1900, and common factory labour, miscellaneous factory trades and lumbering back to 1911. These index numbers are based upon wage rates in 1913, taken as 100.

The accompanying table of index numbers (Table 19) shows the relative changes from year to year. A downward movement appeared in most of the groups in 1921 and 1922, since the peak was reached in 1920. The index numbers for 1923 and 1924 show, on the whole, a slightly upward trend.

In the building trades there were many instances of decreases of 10 cents per hour in 1921 and 5 cents per hour in 1922, but during 1923 and again in 1924 there were some advances. In the metal trades there had been considerable reductions during 1921 and further decreases were made in 1922, while in 1923 and 1924 wages in these trades showed a slight increase. For electric railways the index number averaged lower in both 1921 and 1922, but the wage rates were almost stationary in 1923 and 1924. On steam railways a general cut in wage rates in 1921 was followed in 1922 by decreases for shop employees, maintenance-of-way workers, freight handlers, clerks and miscellaneous classes, but there were no changes for train crews and few changes for telegraphers. At the end of 1922 and early in 1923 there were partial restorations in some cases in the rates for maintenance-of-way employees, freight handlers and clerical employees. In coal-mining there were decreases in the Vancouver Island mines each year, although there were slight increases in the summer of 1922 over the preceding three-month period, in accordance with the agreement by which quarterly adjustments are made, corresponding to changes in the cost of living. In south-eastern British Columbia and southern

in Force during 1924—concluded.

Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.
No child between 12 and 16 may hawk or sell newspapers or other articles in the streets or in public places in any incorporated city, town or village during school hours, without a license and badge from the Superintendent of Neglected Children. No license may be issued to a girl.	Municipal councils may pass by-laws regulating, controlling and licensing children under 16 years engaged in street trades; no license may be granted to a boy under 12, or to a girl. A boy between 12 and 14 must have written authority from his parent or guardian in order to make application for a license. No licensee may engage in any such occupation during school hours or after 8 p.m. in winter and 9 p.m. in summer.	Municipal councils may pass by-laws regulating, controlling and licensing children under 18 years engaged as messengers, vendors of newspapers and small wares, and boot-blacks. No license shall be granted to a girl, or to a boy under 12; a boy between 12 and 14 must have written authority from parent or guardian in order to make application for license. Street trades are prohibited during school hours.	—	—

Alberta there were no changes in wage rates down to 1924, although the average earnings of contract miners declined in 1922, to recover partly in 1923. In Nova Scotia rates were reduced substantially early in 1922, but were increased later in the year. In 1924 there was an increase in Nova Scotia in January, while in October decreases were made in Alberta and Vancouver island. In factory labour and in lumbering there were considerable decreases in wages in 1921 and again in 1922, but there were slight increases in factory labour in 1923 and 1924 and greater increases in lumbering.

19.—Index Numbers of Rates of Wages for Various Classes of Labour in Canada, 1901-1924.

1913=100.

Years.	Building Trades.	Metal Trades.	Printing Trades.	Electric Railways.	Steam Railways.	Coal Mining.	Average.	Common Factory Labour.	Miscellaneous Factory Trades.	Lumbering.
1901.....	60.3	68.6	60.0	64.0	70.8	82.8	67.8	—	—	—
1902.....	64.2	70.2	61.6	68.0	73.6	83.8	70.2	—	—	—
1903.....	67.4	73.3	62.6	71.1	76.7	85.3	72.7	—	—	—
1904.....	69.7	75.9	66.1	73.1	78.6	85.1	74.8	—	—	—
1905.....	73.0	78.6	68.5	73.5	78.9	86.3	76.5	—	—	—
1906.....	76.9	79.8	72.2	75.7	80.2	87.4	78.7	—	—	—
1907.....	80.2	82.4	78.4	81.4	85.5	93.6	83.6	—	—	—
1908.....	81.5	84.7	80.5	81.8	86.7	94.8	85.0	—	—	—
1909.....	83.1	86.2	83.4	81.1	86.7	95.1	85.9	—	—	—
1910.....	86.9	88.8	87.8	85.7	91.2	94.2	89.1	—	—	—
1911.....	90.2	91.0	91.6	88.1	96.4	97.5	92.5	94.9	95.4	93.3
1912.....	96.0	95.3	96.0	92.3	98.3	98.3	96.0	98.1	97.1	98.8
1913.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1914.....	100.8	100.5	102.4	101.0	101.7	101.9	101.4	101.0	103.2	94.7
1915.....	101.5	101.5	103.6	97.8	101.7	102.3	101.4	101.0	106.2	89.1
1916.....	102.4	106.9	105.8	102.2	104.9	111.7	105.7	110.4	115.1	109.5
1917.....	109.9	128.0	111.3	114.6	110.1	130.8	117.5	129.2	128.0	130.2
1918.....	125.9	155.2	123.7	142.9	133.2	157.8	139.8	152.3	146.8	150.5
1919.....	148.2	180.1	145.9	163.3	154.2	170.5	160.4	180.2	180.2	169.8
1920.....	180.9	209.4	184.0	194.2	186.6	197.7	192.1	215.3	216.8	202.7
1921.....	170.5	186.8	193.3	192.1	165.3	208.3	186.1	190.6	202.0	152.6
1922.....	162.5	173.7	192.3	184.4	155.1	197.8	176.8	183.0	189.1	146.7
1923.....	166.4	174.0	188.9	186.2	157.4	197.8	178.4	181.7	196.1	170.4
1924.....	169.9	175.4	192.0	187.8	157.4	192.4	179.2	183.4	197.6	183.2

20.—Rates of Wages and Hours of Labour of Employees of Steam Railways in Canada, 1922-1924.

Occupations.	Unit.	September, 1922.		September, 1923.		September, 1924.	
		Wages.	Hours per week.	Wages.	Hours per week.	Wages.	Hours per week.
		\$		\$		\$	
Conductors, passenger.....	100 miles	4.27	2	4.27	2	4.27	2
Conductors, freight (Irreg.)...	100 miles	5.80	3	5.80	3	5.80	3
Brakemen, passenger.....	100 miles	2.93	2	2.93	2	2.93	2
Brakemen, freight (Irreg.)...	100 miles	4.48	3	4.48	3	4.48	3
Baggagemen, passenger.....	100 miles	3.04	2	3.04	2	3.04	2
Engineers, passenger.....	100 miles	6.00	2	6.00	2	6.00	2
Engineers, freight (Irreg.)...	100 miles	6.64	3	6.64	3	6.64	3
Firemen, passenger.....	100 miles	4.48	2	4.48	2	4.48	2
Firemen, freight (Irreg.)...	100 miles	4.88	3	4.88	3	4.88	3
Despatchers ¹	Month	230.00-238.00	48	230.00-238.00	48	230.00-238.00	48
Telegraphers ¹	Month	117.00-128.00	48	117.00-128.00	48	117.00-128.00	48
Maintenance-of-Way—							
Foremen (on line).....	Day	4.26	48	4.40	48	4.40	48
Sectionmen (on line).....	Day	2.80	48	3.04	48	3.04	48
Car and Shop Trades—							
Blacksmiths.....	Hour	.70	44	.70	44	.70	44
Boilermakers.....	Hour	.70	44	.70	44	.70	44
Machinists.....	Hour	.70	44	.70	44	.70	44
Moulders.....	Hour	.70	44	.70	44	.70	44
Carpenters, freight.....	Hour	.63	44	.63	44	.63	44
Painters, freight.....	Hour	.63	44	.63	44	.63	44
Repairers, freight.....	Hour	.63	44	.63	44	.63	44
Cleaners.....	Hour	.37	44	.38	44	.38	44

¹ Rates for running trades and despatchers and telegraphers in British Columbia are slightly higher than above. Where ranges are shown for despatchers and telegraphers, the lower rate is that paid east of Fort William, and the higher rate is that paid west of Fort William to British Columbia. ² Basis of 20 miles per hour. ³ Basis of 12½ miles per hour.

21.—Wages and Hours of Labour of Employees in and about Coal Mines in Canada, 1921-1924.

Occupations.	Unit.	September, 1921.		September, 1922.		September, 1923.		September, 1924.	
		Wages.	Hours (4) per day.	Wages.	Hours (4) per day.	Wages.	Hours (4) per day.	Wages.	Hours (4) per day.
		\$		\$		\$		\$	
NOVA SCOTIA—									
Contract miners ¹ ..	Day	7.22	8	5.94	8	6.84	8	7.25	8
Hand miners ²	Day	5.05	8	4.30	8	4.30	8	4.60	8
Hoisting engineers	Day	5.15	8	4.35	8	4.35	8	4.60	8
Drivers.....	Day	4.15	8	3.60	8	3.60	8	3.90	8
Bratticemen.....	Day	4.30	8	3.75	8	3.75	8	4.05	8
Pumpmen.....	Day	4.55	8	4.00	8	4.00	8	4.30	8
Labourers, under-ground.....	Day	3.90	8	3.35	8	3.35	8	3.65	8
Labourers, surface	Day	3.80	8½	3.25	8½	3.25	8½	3.50	8½
Machinists.....	Day	5.15	8½	4.35	8½	4.35	8½	4.60	8½
Carpenters.....	Day	4.60	8½	4.00	8½	4.00	8½	4.25	8½
Blacksmiths.....	Day	4.85	8½	4.10	8½	4.10	8½	4.35	8½
ALBERTA³—									
Contract miners..	Day	9.57	8	9.17	8	10.00	8	8.33	8
Machine miners ² ..	Day	8.02	8	8.02	8	8.02	8	7.02	8
Hand miners ²	Day	7.50	8	7.50	8	7.50	8	6.56	8
Hoisting engineers	Day	7.39	8	7.39	8	7.39	8	6.47	8
Drivers.....	Day	7.21	8	7.21	8	7.21	8	6.31	8
Bratticemen.....	Day	7.50	8	7.50	8	7.50	8	6.56	8
Pumpmen.....	Day	6.89	8	6.89	8	6.89	8	6.03	8
Labourers, under-ground.....	Day	6.89	8	6.89	8	6.89	8	6.03	8
Labourers, surface	Day	6.58	8	6.58	8	6.58	8	5.76	8
Machinists.....	Day	8.14	8	8.14	8	8.14	8	7.12	8
Carpenters.....	Day	8.14	8	8.14	8	8.14	8	7.12	8
Blacksmiths.....	Day	8.14	8	8.14	8	8.14	8	7.12	8

21.—Wages and Hours of Labour of Employees in and about Coal Mines in Canada, 1921-1924—concluded.

Occupations.	Unit.	September, 1921.		September, 1922.		September, 1923.		September, 1924.	
		Wages.	Hours (4) per day.	Wages.	Hours (4) per day.	Wages.	Hours (4) per day.	Wages.	Hours (4) per day.
		\$		\$		\$		\$	
VANCOUVER I.D.²—									
Contract miners...	Day	8-10	8	7-23	8	7-14	8	7-09	8
Machine miners ² ...	Day	5-77	8	5-48	8	5-42	8	5-37	8
Hand miners ² ...	Day	5-42	8	5-13	8	5-07	8	5-02	8
Hoisting engineers	Day	6-29	8	6-00	8	5-94	8	5-89	8
Drivers.....	Day	5-07	8	4-78	8	4-72	8	4-67	8
Bratticemen.....	Day	5-07-5-42	8	4-78-5-13	8	4-72-5-07	8	5-02	8
Pumpmen.....	Day	5-07	8	4-78	8	4-72	8	4-67	8
Labourers, under-ground.....	Day	5-07	8	4-78	8	4-72	8	4-67	8
Labourers, surface	Day	4-59	9	4-30	8	4-24	8	4-19	8
Machinists.....	Day	6-66	8	6-37	8	6-31	8	6-26	8
Carpenters.....	Day	5-94	8	5-65	8	5-59	8	5-54	8
Blacksmiths.....	Day	6-41	8	6-12	8	6-06	8	6-01	8

¹ Average earnings per day worked on contract. ² Minimum rate per day when not working on contract, per ton, yard, etc. ³ No figure for Chinese employees included. ⁴ Some engineers, pumpmen, firemen, etc., work seven days per week. ⁵ Including also three mines in south-eastern British Columbia.

22.—Sample Rates of Wages and Hours for Miscellaneous Factory Trades in Canada, 1921-1924.

Industries and Occupations.	1921.		1922.		1923.		1924.	
	Wages per Hour.	Hours per Day.	Wages per Hour.	Hours per Day.	Wages per Hour.	Hours per Day.	Wages per Hour.	Hours per Day.
	\$		\$		\$		\$	
1. COTTON MANUFACTURING.								
Carders—								
Sample No. 1....	.34	9	.34	9	.34	9	.34	9
Sample No. 2....	.26½	10	.27½	10	.27½	10	.27½	10
Sample No. 3....	.32	10	.40	10	.32	10	.31	10
Sample No. 4....	.36	10	.37	10	.40	10	.40	10
Sample No. 5....	.28	9	.27	9	.27	9	.28	9
Sample No. 6....	.27	9	.27	9	.28	9	.28	9
Sample No. 7....	.36	9	.24	10	.27	10	.27	10
Mule Spinners—								
Sample No. 1....	—	—	.44	9	.44	9	.44	9
Sample No. 2....	.38	10	.40	10	.41	10	.39	10
Sample No. 3....	.36	10	.36	10	.41	10	.41	10
Sample No. 4....	.28	9	.28	9	.31	9	—	—
Warpers—								
Sample No. 1....	.21	9	.21	9	.22	9	.22	9
Sample No. 2....	.24	10	.27	10	.26	10	.26	10
Sample No. 3....	.38	10	.37	10	.42	10	.42	10
Sample No. 4....	.27	10	.27	10	.30	10	.30	10
Sample No. 5....	.27	9	.25	9	.27	9	.28	9
Sample No. 6....	.26	9	.25	9	.28	9	.28	9
Sample No. 7....	.28	9	.26	9	.25	9	.25	9
Weavers—								
Sample No. 1....	.34	9	.36	9	.34	9	.37	9
Sample No. 2....	.37	10	.30	10	.34	10	.34	10
Sample No. 3....	.25	10	.25	10	.28	10	.28	10
Sample No. 4....	.22	9	.32	9	.31	9	.32	9
Sample No. 5....	.25	9	.32	9	.32	9	.32	9
2. WOOLLEN MANUFACTURING.								
Carders—								
Sample No. 1....	.30	10	.22½	10	.22½	10	.22½	10
Sample No. 2....	.38	9	.35	9	.35	9	.35	9
Sample No. 3....	.27½	9	.27½	9	.30	9	.30	9
Sample No. 4....	.50	9	.40	9	.40	9	.38	9
Sample No. 5....	.45	10	.45	10	.30	10	.30	10
Sample No. 6....	.44	9	.40	9	.38	9	.38	9
Sample No. 7....	.30	10	.30	10	.32	10	.32	10

22.—Sample Rates of Wages and Hours for Miscellaneous Factory Trades in Canada, 1921-1924—con.

Industries and Occupations.	1921.		1922.		1923.		1924.	
	Wages per Hour.	Hours per Day.	Wages per Hour.	Hours per Day.	Wages per Hour.	Hours per Day.	Wages per Hour.	Hours per Day.
Spinners—	\$		\$		\$		\$	
Sample No. 1....	.18	9	.18	9	.18	10	.18	10
Sample No. 2....	.50	10	.40	9	.40	9	.40	9
Sample No. 3....	.31	9	.30	9	.32½	9	.30	9
Sample No. 4....	.25-.30	10	.22	10	.22	10	.22	10
Sample No. 5....	.25	10	.25	10	.25	10	.25-.30	10
Weavers—								
Sample No. 1....	.27	10	.27	10	.26	10	.26	10
Sample No. 2....	.33	10	.32	10	.32	10	.32	10
Sample No. 3....	.25	10	.24	10	.24	10	.25	10
Sample No. 4....	.27	9	.28	9	.28	9	.26	9
Sample No. 5....	.22	9	.23	10	.30	10	.22	10
Sample No. 6....	.17½	10	.20	10	.25	10	.22½	10
Sample No. 7....	.52	8	.53	9½	.50	9½	.46	9½
3. MANUFACTURING BOOTS AND SHOES.								
Cutters—								
Sample No. 1....	.25	10	.25	10	.25	10	.29	10
Sample No. 2....	.55	9	.56	9	.54	9	.55	9
Sample No. 3....	.62½	8	.67	8	.62½	8	.62½	8
Sample No. 4....	.60	9	.60	9	.60	9	.66	9
Sample No. 5....	.56	10	.59	10	.55	10	.48	10
Sample No. 6....	.45	10	.50	9	.50	10	.50	9
Sample No. 7....	.35	10	.32	10	.32	10	.27	10
Lasters—								
Sample No. 1....	.25	10	.25	10	.27	10	.25	10
Sample No. 2....	.55	9	.55	9	.45	9	.45	9
Sample No. 3....	.51	9	.51	9	.58	9	.55	9
Sample No. 4....	.43	9	.40	9	.40	9	.40	9
Sample No. 5....	.34	10	.33	10	.36	10	.36	10
Sample No. 6....	.66	8	.55	8	.62	8	.57	8
Stitchers—								
Sample No. 1....	.13	10	.16	10	.16	10	.16	10
Sample No. 2....	.20	9	.18	9	.21	9	.27	9
Sample No. 3....	.14	8½	.12	8½	.21	8½	.27	8½
Sample No. 4....	.13	10	.21	10	.19	10	.18	10
Sample No. 5....	.22	9	.24	9	.22	9	.20	9
Sample No. 6....	.19	10	.24	10	.25	10	.22	10
Sample No. 7....	.23	9	.23	9	.23	9	.23	9
Machine Opera-								
tors—								
Sample No. 1....	.26	10	.27	10	.27	10	.29	10
Sample No. 2....	.32	8½	.42	8½	.37½	8½	.37½	8½
Sample No. 3....	.51	9	.46	9	.41	9	.45	9
Sample No. 4....	.28	10	.23	10	.18	10	.18	10
Sample No. 5....	.41	10	.38	10	.40	10	.52	9
Sample No. 6....	.33	9	.31	9	.31	9	.31	9
Sample No. 7....	.35	8½	.47	8½	.41	8½	.41	8½
4. MANUFACTURING HARNESS AND SADDLERY.								
Harness Makers—								
Sample No. 1....	.39	9½	.39	9	.39	9	.42	9
Sample No. 2....	.30	8	.44	9	.51	9	.51	9
Sample No. 3....	.50	9	.45	9	.45	9	.45	9
Sample No. 4....	.50	9	.40	9	.40	9½	.40	9½
Sample No. 5....	.54	8	.52	8	.57	8½	.54	8
Sample No. 6....	.50	9	.45	9	.46	9	.46	9
Saddle Makers—								
Sample No. 1....	.45	9½	.45	9	.45	9	.48	9
Sample No. 2....	.42	8	.31	8	.31	8	.31	8
Sample No. 3....	.56	9	.50	9	.59	9	.50	9
Sample No. 4....	.45	9	.41	9	.46	9	.46	9
Sample No. 5....	.65	9	.65	8	.65	8	.65	8
5. MEAT PACKING.								
Slaughterees—								
Sample No. 1....	.50-.55	9	.45-.50	9	.40-.50	9	.35-.50	9
Sample No. 2....	.49	9	.41	9	.43	9	.40	9
Sample No. 3....	.60	9	.60	9	.60	9	.60	9
Sample No. 4....	.67	9	.62	9	.62	10	.62	8
Sample No. 5....	.69	8	.60	9	.65	8	.65	10
Sample No. 6....	.59	8½	.51	8½	.54	8½	.55	8½

22.—Sample Rates of Wages and Hours for Miscellaneous Factory Trades in Canada, 1921-1924—concluded.

Industries and Occupations.	1921.		1922.		1923.		1924.	
	Wages per Hour.	Hours per Day.	Wages per Hour.	Hours per Day.	Wages per Hour.	Hours per Day.	Wages per Hour.	Hours per Day.
MEAT PACKING—con.	\$		\$		\$		\$	
Curers—								
Sample No. 1....	.40	9	.35-.40	9	.35-.45	9	.35-.45	9
Sample No. 2....	.42	10	.42	10	.50	10	.50	10
Sample No. 3....	.52	10	.45-.48	10	.45-.50	10	.45-.50	10
Sample No. 4....	.55	8½	.47½	8½	.52	8½	.52	8½
Sample No. 5....	.61	8½	.61	8½	.60	8½	.60	8½
Sample No. 6....	.42	8	.42	9	.42	8	.45	8
Lard Makers—								
Sample No. 1....	.46	9	.43	9	.43	9	.43	9
Sample No. 2....	.50	10	.45	10	.45	10	.45	10
Sample No. 3....	.42	8½	.42	8½	.40-46	8½	.35-.43	8½
Sample No. 4....	—	—	.42	8½	.44	8½	.44	8½
Sample No. 5....	—	—	.27	8½	.28	8½	.28	8½
Sample No. 6....	.45-.50	8	.40	9	.40	8	.40	8
6. AUTOMOBILE MANUFACTURING.								
Assemblers—								
Sample No. 1....	.40	9	.45	8	.45	9	—	—
Sample No. 2....	.60	8	.50	9	.50	9	.60	9
Sample No. 3....	—	—	.46	9½	.50	9½	.50	9½
Sample No. 4....	.55	9	.50	9	.55	9	.55	8
Sample No. 5....	.60	9	.55	9	.60	9	.60	8
Painters—								
Sample No. 1....	—	—	.75	8½	.75	8½	.75	8½
Sample No. 2....	.60	8	.63	9	.60	8	.60	9
Sample No. 3....	—	—	.80	8½	.80	8½	.80	8½
Toolmakers—								
Sample No. 1....	.65	8	.55	9	.60	9	.55	9
Sample No. 2....	.60	9	.60	9	.80	9	.80	9
Sample No. 3....	.70	9	.70	9	.70	9	.70	9
Sample No. 4....	.70	10	.75	10	.85	10	.90	10
Millwrights—								
Sample No. 1....	—	—	.75	8½	.75	8	.75	8
Sample No. 2....	.55	8½	.55	10	.78	10	.78	10
Sample No. 3....	.85	10	.85	10	.70	10	.75	10
Sample No. 4....	.65	9	.60	9	.65	9	.65	9

23.—Samples of Wages and Hours of Labour for unskilled Factory Labour in Canada, 1921-1924.

Localities.	Unit.	1921.		1922.		1923.		1924.	
		Wages.	Hours per week.	Wages.	Hours per week.	Wages.	Hours per week.	Wages.	Hours per week.
		\$		\$		\$		\$	
Nova Scotia—									
Halifax, No. 1....	Hour	.37½	50	.27½	50	.30	50	.30	50
Halifax, No. 2....	Hour	.35	55	.32	50	.30	50	.30	55
Sydney, No. 1....	Hour	.29	60	.28	59	.33	60	.33	60
New Brunswick—									
St. John, No. 1....	Day	3.15	54	2.52	54	2.85	54	2.80	54
St. John, No. 2....	Hour	.25	60	.25	60	.28	60	.28	60
Quebec—									
Quebec, No. 1....	Hour	.30	48	.30	48	.30	54	.30	54
Montreal, No. 1....	Hour	.35	50	.30	45	.32½	45	.32½	55
Montreal, No. 2....	Week	15.00	48	16.00	48	14.00	48	12.00	48
Montreal, No. 3....	Hour	.37½	55	.37½	55	.30	55	.35	55
Montreal, No. 4....	Hour	.40	55	.35	50	.35	50	.35	50
Montreal, No. 5....	Hour	.31	55	.25	55	.30	55	.30	55
Montreal, No. 6....	Hour	.40	48	.40	48	.40	48	.40	48
Granby, No. 1....	Hour	.26	55	.26	55	.30	55	.30	55
Ontario—									
Guelph, No. 1....	Hour	.38	49½	.35	49½	.33½	49½	.33½	49½
Ingersoll, No. 1....	Week	18.00	60	18.74	60	18.60	60	19.20	60
Hamilton, No. 1....	Hour	.30	55	.30	55	.37½	55	.37½	55
Toronto, No. 1....	Hour	.35	50	.35	50	.30-.35	50	.35-.40	50
Toronto, No. 2....	Hour	.45	48	.42	48	.44	48	.44	48
Toronto, No. 3....	Hour	.40-.45	50	.40-.55	50	.45-.55	50	.45-.55	50
Toronto, No. 4....	Hour	.40-.45	44	.30-.40	44	.40-.45	44	.40-.45	44

23.—Samples of Wages and Hours of Labour for unskilled Factory Labour in Canada, 1921-1924—concluded.

Localities.	Unit.	1921.		1922.		1923.		1924.	
		Wages.	Hours per week.	Wages.	Hours per week.	Wages.	Hours per week.	Wages.	Hours per week.
		\$		\$		\$		\$	
Manitoba—									
Winnipeg, No. 1...	Week	20.20	44	16.75	54	16.75	54	17.55	54
Winnipeg, No. 2...	Hour	.50	50	.42½	50	.42½	50	.42½	50
Winnipeg, No. 3...	Hour	.40-.45	48	.40-.45	48	.40-.45	48	.40-.45	48
Saskatchewan—									
Regina, No. 1....	Hour	.50	44	.50	44	.50	44	.50	44
Alberta—									
Calgary, No. 1....	Week	24.00	48	24.48	48	21.60	48	21.60	48
Calgary, No. 2....	Hour	.45	48	.40	48	.40	48	.40	48
British Columbia—									
Vancouver, No. 1	Day	4.20	44	3.78	44	4.00	44	4.00	44
Vancouver, No. 2	Hour	.52½	44	.47½	44	.47½	44	.50	44
Vancouver, No. 3	Hour	.35	55	.30-.35	55	.30-.40	55	.25-.40	55

24.—Rates of Wages and Hours of Labour in Various Trades in Certain Cities of Canada, 1921-1924.

Industries and Occupations.	Unit.	Halifax.		Montreal.		Toronto.		Winnipeg.		Vancouver.	
		Wages.	Hours per week.	Wages.	Hours per week.	Wages.	Hours per week.	Wages.	Hours per week.	Wages.	Hours per week.
		\$		\$		\$		\$		\$	
1. Electric Railways											
Conductors and motormen...	1921 Hour	.52	63	.48	60	.60	48	.60	50	.65	48
	1922 Hour	.47	63	.48	60	.60	48	.56	50	.58½	48
	1923 Hour	.45	63	.48	60	.60	48	.56	50	.62	48
	1924 Hour	.45	63	.51	60	.60	48	.56	50	.62	48
2. Building Trades—											
Bricklayers and masons.....	1921 Hour	.75	44	.90-1.00	44-50	1.00	44	1.15	44	1.06½	44
	1922 Hour	.70-.75	44	.90	44-50	1.00	44	1.15	44	1.06½	44
	1923 Hour	.90	44	1.00	44-50	1.00	44	1.10	44	1.06½	44
	1924 Hour	.90	44	1.00	44-50	1.25	44	1.10	44	1.12½	44
Carpenters.....	1921 Hour	.66	44-54	.60-.70	44-55	.90	44	.90	44	.81½	44
	1922 Hour	.55-.57	44-54	.50-.65	44-60	.70-.90	44	.85	44	.81½	44
	1923 Hour	.57	44	.60-.72½	50-60	.85-.90	44	.85	44	.81½	44
	1924 Hour	.57	44	.65-.75	44-50	.90	44	.85	44	.87½	44
Plumbers.....	1921 Hour	.70	44	.62½-.75	44-60	.90	44-48	1.00	44	.90	44
	1922 Hour	.60	44	.70-.75	44-50	.90	44	.90	44	.90-1.00	44
	1923 Hour	.60	44	.70-.85	44-50	.90	44	.90-1.00	44	1.00	44
	1924 Hour	.60	44	.70-.80	44-50	1.00	44	1.00	44	1.00	44
Labourers.....	1921 Hour	.40-.45	54	.30-.40	44-60	.50-.60	44	.50-.55	44-60	.50-.62½	44
	1922 Hour	.30-.40	44-60	.25-.40	50-60	.45-.50	44	.40-.50	44-60	.40-.50½	44-50
	1923 Hour	.30-.40	44-60	.30-.50	50-60	.40-.65	44	.35-.50	44-60	.50	44
	1924 Hour	.30-.40	44-54	.30-.40	44-60	.45-.65	44	.40-.50	44-50	.45-.50	44
3. Metal Trades—											
Blacksmiths...	1921 Hour	.62½-.72½	44-50	.55-.70	44-55	.60-.70	44-50	.80-.82½	44-50	.78	44
	1922 Hour	.50-.65	44-50	.45-.65	45-55	.55-.75	44-50	.72-.80	44-50	.62½-.70	44
	1923 Hour	.55-.65	44-50	.55-.65	49½-55	.55-.75	44-50	.72-.85	44-50	.66-.75	44
	1924 Hour	.55-.65	44-50	.57½-.60	49½-55	.55-.75	44-50	.70-.80	50	.68-.75	44
Machinists.....	1921 Hour	.62½-.72½	44-50	.55-.70	44-58	.50-.75	44-48	.65-.85	44-50	.75-.85	44-50
	1922 Hour	.50-.65	44-50	.50-.70	44-60	.50-.70	44-50	.60-.85	44-50	.62½-.75	44
	1923 Hour	.55-.65	44-50	.50-.66	47-58	.54-.70	44-50	.65-.77	44-50	.66-.80	44
	1924 Hour	.55-.65	44-55	.50-.65	49½-55	.54-.70	44-50	.65-.70	50	.68-.80	44
Iron moulders.	1921 Hour	.62-.70	48	.65-.70	48	.63-.75	48-50	.75	44-50	.75-.86½	44
	1922 Hour	.62-.70	48	.65	48	.55-.67	48-50	.65-.68	50	.67½-.77½	44
	1923 Hour	.62-.70	48	.70-.75	48	.60-.67	48-50	.65-.68	50	.67½-.81½	44
	1924 Hour	.62-.70	48	.75-.80	48-50	.60-.70	45-50	.60-.70	50	.71½-.81½	44

24.—Rates of Wages and Hours of Labour in Various Trades in Certain Cities of Canada, 1921-1924—concluded.

Industries and Occupations.	Unit.	Halifax.		Montreal.		Toronto.		Winnipeg.		Vancouver.	
		Wages.	Hours per week.	Wages.	Hours per week.	Wages.	Hours per week.	Wages.	Hours per week.	Wages.	Hours per week.
		\$		\$		\$		\$		\$	
Sheet metal workers.....	1921 Hour	62½-.70	48-50	.60-.70	44	.60-.80	44-48	.60-.75	44-54	.90	44
	1922 Hour	.60	44	.60-.65	44	.60-.85	44-48	.60-.80	44-54	.90	44
	1923 Hour	.60	44	.60-.70	44	.60-.85	44-49½	.60-.80	44-54	.90	44
	1924 Hour	.60	44	.60-.70	44	.60-.85	44-49½	.65-.85	44-50	1.00	44
4. Printing Trades—											
Compositors, Hand, News	1921 Week	32.00	48	36.00	48	38.00	48	48.00	46	40.50	45
	1922 Week	32.00	48	36.00	48	38.00	48	47.50	46	40.50	45
	1923 Week	32.00	48	38.00	48	41.00	46½	42.32	46	43.50 ²	45
	1924 Week	32.00	48	42.00	48	41.00	46½	42.32	46	45.00	45
Pressmen, Web, news.....	1921 Week	28.00 ¹	48	36.00	48	37.00	48	44.00	48	40.50	48
	1922 Week	28.00 ¹	48	36.00	48	37.00	48	44.00	48	40.50	48
	1923 Week	28.00 ¹	48	36.00	48-60	40.00	48	42.00	48	40.50	48
	1924 Week	28.00 ¹	48	36.00	48-60	40.00	48	42.00	48	45.00	48
Bookbinders...	1921 Week	30-35	48	34.00	48	36.00	48	36.00	48	39.60	44
	1922 Week	30-37.50	48	34.00	48	36.00	48	36.00	48	39.60	44
	1923 Week	30-37.50	48	34.00	48	36.00	48	30-37.50	44-48	40.50	48
	1924 Week	25-35.00	48	33.75-36	48	36.00	48	32-39.00	44-48	42.00	44
Bindery girls...	1921 Week	10.00	48	14.50-15	48	16.50-19	48	15.50	48	14-18.50	44-48
	1922 Week	10.00	48	14.50-15	48	16.50-19	48	12-15.00	48	14-18.50	44-48
	1923 Week	10.00	48	14.50-15	48	16.80	48	12-16.00	44-48	16-20.25	25
	1924 Week	10.00	48	14.50-15	48	16.80	48	12-16.50	44-48	14-20.25	48

¹ Halifax rates are for cylinder pressmen.

² From July 1, 1923, \$45.

Wages in Canadian Manufacturing Industries in 1921 and 1922.

The census of manufactures has for some years collected statistics of wages paid in manufacturing establishments; the information available for 1922 is given in Tables 16 to 20 on pages 413 to 415 in the section on Manufactures.

The statistics show that though the average number of wage and salaried employees increased in 1922 over 1921 by 5 p.c., there was a decline of 0.3 p.c. in their earnings. The average index number of retail prices, compiled by the Department of Labour, declined from 161 in 1921 to 148 in 1922, or by approximately 8 p.c.

The average earnings of the 74,884 salaried employees covered in 1922 were \$1,787, of the 387,689 factory hands, \$937, and of the two classes together, \$1,075. In 1921 salaried employees averaged \$1,819, wage earners, \$996 and all employees, \$1,133.

The number of male workers reported increased in 1922 by 3.5 p.c., while the number of female workers was greater by 11.1 p.c. Out of every 1,000 persons employed by manufacturers in 1922, 765 were males and 235 were females; in the preceding year the ratio was 778 to 222.

An analysis of the 1922 returns by provinces shows that 31.3 p.c. of the total earners employed in manufacturing were in Quebec, but that province reported only 28.4 p.c. of the total earnings paid. In Ontario there were 51.3 p.c. of the total earners, who were paid 54.1 p.c. of the earnings.

As to wage earners, 50.4 p.c. in Ontario earned 53.6 p.c. of the total wages, while in Quebec 32.2 p.c. of the earners received 28.4 p.c. of the wages. The situation in respect of salaried employees was somewhat different in these provinces; Ontario manufacturers employed 55.8 p.c. of such earners, whose salaries formed 55.4 p.c. of the total, while in Quebec 27 p.c. of the salaried employees earned 28.2 p.c. of the salaries.

The largest number of persons engaged in any one group of manufacturing was in wood and paper, which employed 25.6 p.c. of the total workers and paid 26.6 p.c. of the total wages. The textile industries, with 19 p.c. of workers and 15.3 p.c. of earnings, and the iron and steel group, with 16.1 p.c. of employees and 18.2 p.c. of earnings, came next in order.

Minimum Wages for Female Employees.

Minimum Wage Acts are on the statute books of Manitoba, British Columbia, Quebec, Saskatchewan, Nova Scotia, Ontario and Alberta, but the Quebec Act, passed in 1919, has not yet taken effect. A Minimum Wage Act was enacted in Nova Scotia in 1920, but no Board was appointed under its provisions. During 1924 a new and more comprehensive Act became law. The new Act applies to "every female person in any trade or occupation in Nova Scotia who works for wages." Farm workers and domestic servants, however, are expressly excepted. The Minimum Wage Board will, when it is appointed, consist of five members, two of whom must be women.

Table 25 shows comparatively the weekly wages for experienced adults fixed by the Boards of Alberta, British Columbia, Manitoba, Ontario and Saskatchewan. In Manitoba orders were issued separately for each type of factory; these are grouped in the table under the heading "Manufacturing."

Minimum wage orders in all provinces fix special rates for learners, apprentices or minors, that is, workers under 18 years of age, and some make provision for the physically defective. The learning period ranges from three to eighteen months, according to the nature of the occupation affected by the order, and the rates of wages advance by stages of proficiency until the full minimum wage for experienced adults is reached.

The Boards have power to limit the number of learners and minors employed at a plant. The proportion of these classes to experienced workers varies widely. In British Columbia the proportion for factory workers is 14.3 p.c. and in Manitoba 25 p.c. In Ontario the proportion allowed is 50 p.c. of adult learners and minors combined; neither of these classes, however, can exceed 33 p.c. of the experienced adults employed. The orders so far issued by the Alberta Board have laid down no limits in this respect.

The Boards of all provinces, except Quebec, have power to fix not only the minimum wages, but also the maximum number of hours for which such wages shall be paid. There is, however, a wide divergence in the standards of working hours which have been fixed by the various orders. Many of these orders provide for a working week of 48 hours, but allow latitude in regard to the distribution of these hours throughout the week, to permit of a Saturday half-holiday, with consequent lengthening of working hours beyond 8 hours on the other days of the week.

The Alberta Board has issued orders stating that the working week is 48 hours, except in the case of stores, but by an amendment to the Act in 1924, the Board may provide for longer working hours under pressure of seasonal work.

In British Columbia a week of 48 hours is prescribed for workers in offices, in public housekeeping, in personal service, in theatres, and in telephone and telegraph services; special rules to govern overtime work are laid down in that province for the fruit and vegetable industry. Working hours for women and girls in factories are subject to the provisions of the Provincial Factories Act, while no provision is made regarding the hours of mercantile, laundry or fishery workers.

In Manitoba the regulations of the Board governing most types of factories provide for a 9-hour day and a 48-hour week, but longer hours are permitted in some employments. Thus, bag makers and jewelry workers have a 9-hour day and a 49-hour week; auto top, bedding, glove, dyeing and cleaning workers have a 9-hour day and a 50-hour week; and millinery, knitting, tailoring and dressmaking employees have an 8½-hour day and a 50-hour week. Laundry workers may be employed for 52 hours in the week, but not for more than 9 hours in any day. The Saturday working hours in shops and stores are 11½, with a weekly maximum of 49 hours, or 53 per week in 5c., 10c. and 15c. stores. Office workers in the same province have a maximum week of 44 hours with a maximum day of 8 hours.

The Ontario Board has as yet fixed no definite limits for the working day or week, but the recent orders governing office workers provide that the minimum rates for part time workers shall be based on a regular working week of 48 hours.

In Saskatchewan no time limit is fixed for milliners and dressmakers, but a 48-hour week is fixed as the maximum normal period of employment in laundries and factories, shops, stores and mail order houses, hotels and restaurants.

Trades Conferences.—The Boards of Alberta, British Columbia and Ontario, before fixing minimum wage rates for any occupation, summon conferences consisting of representatives of the workers, their employers, and of the general public, and the order which follows generally represents a compromise between the views of the interested parties, though the Board is not bound by the recommendations of such conferences. The Manitoba Board has judicial powers in regard to the taking of evidence before deciding on minimum wage rates. The Nova Scotia Board, under the Act of 1924, will have similar powers in regard to wage conferences.

Minimum Wage Boards.—The Minimum Wage Board of Alberta, established in 1922, consists of three members appointed by the Lieutenant-Governor in Council, and representing respectively the employers, the employed and the province at large, one of the members being named chairman of the Board. In British Columbia also, the Board consists of three members; one of these, the Provincial Deputy Minister of Labour, acts as chairman. Similar rules are laid down for the appointment of the Minimum Wage Commission in Quebec, with the further provision that one of the three members be a woman. The Acts of Nova Scotia, Ontario, Manitoba and Saskatchewan place administration in the hands of Boards of five members, including two women, all the members being appointed by the Provincial Government. Board members are allowed no remuneration in British Columbia or Quebec; in Ontario they receive a *per diem* allowance for transaction of official business, while the Acts of Nova Scotia, Manitoba and Saskatchewan allow the members regular remuneration for their services and expenses.

25.—Minimum Weekly Wages for Experienced Female Adults.

Occupations.	Alberta.	British Columbia.	Manitoba.	Ontario.	Saskatchewan.
Manufacturing.....	\$12.50	\$14.00	\$11.00 to \$12.00	According to population \$12.50 11.50 11.00 10.00	\$15.00 (Millinery and dressmaking.)
Shops and stores...	\$12.50	\$12.75 (26½ cents per hour.)	\$12.00	According to population \$12.50 12.00 11.00 10.00 9.00 8.00	\$14.00 (Shops and stores.) \$13.00 (Mail order houses.)
Laundries, dyeing and cleaning, etc.	\$12.50	\$13.50 (28½ cents per hour.)	\$11.00 to \$12.00	According to population \$12.00 11.00	\$13.00
Offices.....	\$14.00	\$15.00 (\$65 per month.)	\$12.50	According to population \$12.50 12.00 11.00 10.00 9.00 8.00	—
Hotels, restaurants, boarding houses, etc.....	\$14.00 for 6-day week, \$16.50 for 7-day week.	\$14.00 (includes waitresses, chambermaids, elevator operators, etc.)	\$12.50	\$12.50 (in Toronto.)	\$13.00 for 6-day week of 48 hours. Kitchen employees \$11. \$14.00 for 7-day week. Kitchen employees \$12.
Personal service...	\$14.00 (includes ushers, barbers, cloak-room attendants, etc.)	\$14.25	\$12.00	—	—
Telephone and telegraph employees.....	—	\$15.00	—	According to population \$12.50 12.00 11.00 10.00 9.00 8.00 7.00	—
Fishing.....	—	\$15.50	—	—	—
Fruit and vegetable industry...	—	\$14.00 for week of 48 hours. Piece work rates on this basis.	—	—	—

III.—PRICES.

Commodity prices naturally fall into two main divisions—wholesale prices and retail prices. Because the number of wholesale traders is smaller than that of retail traders, buying and selling by carefully defined grades more prevalent, and price ranges at any particular time and place much narrower, it would appear that in comparison wholesale prices have an advantage over retail prices. But this advantage is largely offset by certain difficulties inherent in the nature of index numbers of wholesale prices. The making of an index number of wholesale prices for general purposes requires the inclusion of a much larger range of commodities than is necessary for a retail or cost of living index. Moreover, wholesale commodities are in all stages from raw material to finished product, while retail prices are concerned only with the latter. At each stage in the evolution of a commodity we are frequently confronted with several grades, and this situation is complicated by the fact that grades undergo changes in the course of time. Hence, to secure from month to month and year to year quotations which give accurate continuity is a task in which eternal vigilance is the price of success. The maker of wholesale index numbers must be assiduous in acquiring and keeping up to date a knowledge of grades and qualities, and in dealing with a very large list of commodities this is a difficult task. This knowledge has constantly to be applied to the quotations taken from trade papers and other journals, in which many inaccuracies are found. In retail prices the question of grades and qualities is best ignored and index calculations based on the predominant selling prices of particular commodities.

Another pitfall to be avoided in dealing with wholesale quotations is that relating to the conditions of sale, whether the price is f.o.b., delivered, c.i.f. or otherwise. Continuity must be maintained, but trade journals are often inadequate in this respect. In the case of retail prices, some account may be taken of service rendered to the purchaser or its curtailment, as in a "groceteria" or "a cash and carry store," but this is not imperative if predominant prices are used.

Wholesale transactions are generally between expert buyers and sellers, dealing on purely business principles. Accordingly, wholesale prices conform approximately to the operation of the principle of supply and demand, and are thus more valuable as an index to the current state of business. Retail prices, on the other hand, are largely governed by custom and do not respond to the fluctuations in wholesale prices. Further, small fluctuations in wholesale prices are not fairly reflected in retail prices because of the limitations of the currency in representing small quantities of commodities. Again, retail prices vary considerably for the same commodity in different parts of the same city, due to difference in the service rendered, to location of stores and to classes of customers. In the collection of retail price statistics it is necessary to take quotations from the most representative class of retailers, serving the masses of the people.

Further, since wholesale prices are determined by the business situation of the moment, while retail prices are largely determined by custom and change comparatively slowly, there exists what is technically called a "lag" between the two, retail prices not showing changes in fundamental business conditions until some time after wholesale prices. Thus, while wholesale prices in Canada reached the peak in May, 1920, and commenced to decline in June, retail prices reached the peak in July, 1920, and began to decline in August.

1.—Wholesale Prices.

The Dominion Bureau of Statistics issues monthly in a press letter, entitled "Prices and Price Indexes," the official index number of wholesale prices in Canada. This index, while constructed with a view to giving continuity with that issued from 1910 to 1917 by the Department of Labour, has been improved by the adoption of several ideas developed in the science of index number making since the old index was first computed, and by the substitution of new commodities or price series for those which have ceased to be representative as a result of the passage of time. A description of the method used in making this index number, as published in the last annual report on prices and price indexes, is appended.¹

The Index Number.—The chief problems which enter into the making of an index number are (1) the choice and grouping of commodities, (2) the selection of a base period, (3) the collection of prices, and (4) the method of weighting and the formula used.

Choice of Commodities.—The number and kind of commodities to be included have been determined on the basis of the relative importance of the various groups in the general trade of the country. The group of Grains, Fruits and other Vegetable Products was estimated to have a relative importance in trade of 28·1 p.c.; Animals and their Products, 21·1 p.c.; Textiles, 11·8 p.c.; Wood and its Products, 8·8 p.c.; Iron and Steel, etc., 10·9 p.c.; Non-Ferrous Metals, 6·3 p.c.; Non-Metallic Minerals, 7·1 p.c.; and Chemicals, 5·9 p.c. On this basis the number of price series allotted to each group was as follows: Vegetable Products (grains, fruits, etc., except wood, fibres and chemicals), 67; Animals and their Products (except chemicals and fibres), 50; Fibres, Textiles and Textile Products, 28; Wood, Wood Products and Paper, 21; Iron and its Products, 26; Non-Ferrous Metals and their Products, 15; Non-Metallic Minerals and their Products (except chemicals), 17; Chemicals and Allied Products, 14; Total, 238.

It is, of course, essential to select commodities which do not change in character. This is difficult in the case of many manufactured articles, but the list included has been chosen with a view to securing continuity in the quality of each commodity. Most raw materials readily measure up to this requirement, as well as a considerable number of partly or fully manufactured lines. Many index numbers are constructed from a much smaller list of price series, but the larger list increases the general usefulness of the index for purposes of reference and better reveals the changes in the general level of prices. It also facilitates continuity with the former official index number.

The method of grouping the items is in conformity with the general plan adopted throughout the Bureau in presenting commodity statistics, so that co-ordination will be possible between the statistics of prices and those of imports and exports, production, transportation, etc. The items are grouped on three distinct principles which are each applied separately—"Chief Component Material" (vegetable, animal, wood, iron, etc.), "Use or Purpose" (food, clothing, producers' goods, etc.) and "Origin" (farm, forest, mineral, marine, etc.). By this method, each group has a degree of comprehensiveness and accuracy which it is difficult to secure in a classification scheme which adopts more than one of these principles within the same category. In the case of the Purpose classification a few important commodities have been included twice, so as to appear in both Consumers' and Producers' goods. In the Origin classification, despite uncertainties of degree, all

¹See also Prices and Price Indexes, 1913-1923, published by the Dominion Bureau of Statistics.

the commodities have been divided into two groups, (1) Raw or Partly Manufactured Products and (2) Fully or Chiefly Manufactured Products, predominant usage having been followed as closely as possible.

Base Period.—The old official index number was based on the period 1890-1899. In view of the upheaval in prices occasioned by the war, comparisons are now called for in the main with the period immediately preceding it. In any event, comparisons with a period now so remote as 1890-1899 are not practical, and it is a fact that the more remote the base the wider is the margin of error in the index. The year 1913 has been adopted by the Bureau as the base period, in conformity with the practice in most other countries. Prices in the year 1913 are represented by the figure 100, and prices in prior and subsequent years are expressed as percentages of those prevailing in 1913.

Collection of Prices.—The collection of prices is perhaps the most important matter in connection with index numbers, and in their collection the policy of the Bureau is to secure as many as possible from reliable individual firms. Certain trade papers are used for quotations on commodities such as grain and other farm products which are traded in on organized markets.

The Bureau does not adhere rigidly to any one system as to the kind of price used. Many of the prices are those current on the fifteenth of each month, but where a commodity is subject to frequent fluctuations, the price prevailing on a single day of the month may not be representative. This method has, therefore, been supplemented by the use of monthly averages, averages of weekly quotations (one quotation per week being taken) or the selection of a predominant price. By this means it is thought that a more representative series of prices is obtained.

Weighting.—The Bureau follows the principle now widely accepted that an index number which is weighted with even approximate accuracy is more reliable than one which is unweighted, and in connection with this process, two questions have to be decided—(1) whether to use as weights the quantities of commodities marketed, produced or consumed, and (2) what formula to select for the purpose of combining the quantities and prices into index numbers.

The quantities used in weighting are those actually marketed. In other words the weighting of each commodity is in relation to its commercial importance, duplication being avoided where possible. Weighting according to quantities consumed or produced would doubtless give different results, but the method of weighting according to quantities marketed or exchanged is more logical, seeing that much of what is produced does not reach the market in its original state, if at all, and would not affect prices in the same way as if it had, while a strict consumption standard would not take account of quantities exported.

One more step in weighting is necessary to ensure the most accurate results. The 238 price series have been classified into various groups. In the chief component material classification there are eight. Within these groups the weighting of each commodity ensures that it exercises its proper influence, but the weighting of each commodity accurately within a group will not ensure the group as a whole exercising its proper influence upon the total result. That will depend upon whether or not the group total bears its proper ratio to the grand total. If, in the total trade of the country, vegetable products were estimated to have a relative importance represented by 28.1 p.c., then the vegetable products group in the index number should bear that ratio to the grand total for the 238 commodities. In order to have each group exert its proper influence on the final result, it was found necessary to multiply the group totals by certain numbers which may be termed group weights as distinguished

from individual weights. The group weights are as follows: Vegetable Products, 1.4; Animals and their Products, 1.0; Fibres, Textiles and Textile Products, 3.4; Wood and Wood Products, 1.3; Iron and its Products, 4.0; Non-Ferrous Metals and their Products, 1.9; Non-Metallic Minerals and their Products, 1.1; Chemicals and Allied Products, 6.5.

In an unweighted index number each group would be given adequate representation by allotting to it a definite number of commodities. For example, since vegetable products are estimated to have an importance of 28.1 p.c. in the trade of the country, this group would have 28.1 p.c. of 238 commodities, that is, it would include 67 commodities. But when weighting is introduced, the percentage must be applied to the aggregate value of all the 238 commodities in the base year, and in order to ensure the proper relationship of the ratios it was found necessary to adopt group weights.

The choice of the formula to be used in calculating index numbers has been much simplified in recent years by the work of such writers on the subject as Fisher, Knibbs and Walsh. In "The Making of Index Numbers," Professor Irving Fisher discusses the numerous mathematical formulæ which may be used for index number calculations. These are classified as good or bad according as they pass two great tests—(1) the time reversal test, which requires that the formula for calculating an index number should be such that it will give the same ratio between one point of comparison and another point, no matter which of the two is taken as the base; (2) the factor reversal test, in which the formula should be such that if a price index is made and a quantity index then made by interchanging the prices and quantities used to compute the price index, the products of the two should be the true value ratio.

A formula which does not completely satisfy these tests but which has found a great deal of favour is that known as Laspeyre's; it is expressed—

$$\frac{\sum P_1 Q_0}{\sum P_0 Q_0}$$

where Σ = Sum; Q_0 = Quantities or weights in the earlier year or base year; P_0 = Prices in the base or earlier year; P_1 = Prices in the given year to be compared with the base or earlier year.

This formula has been adopted by the Bureau in its index number computations; it is also used in the Australian index numbers, in the United States Bureau of Labour index numbers, the South African index and others, in addition to having been endorsed by the British Empire Statistical Conference in 1920.

The formula in question is known as the "aggregative" method. It is a comparison of the aggregate value of stated quantities of a set list of goods in any year, with an identical list of goods and quantities at prices which prevailed in the year chosen as the base for the comparison. The number of commodities, their quality, and the weights or quantities used remain constant; the prices change and, therefore, the total sum necessary to purchase that list of commodities will change. By dividing one sum into the other, the percentage of increase or decrease in the value of the list may be obtained and this is the index of prices. Using mathematical symbols the process may be described by saying that, in order to find the relative price of a commodity in any year as compared with the base year, the price of the commodity in the later year multiplied by the weight ($P_1 Q_0$) is divided by the price of the commodity in the base year multiplied by the same weight ($P_0 Q_0$). To find the index for all commodities, each is multiplied by its weight, the products are then all added together and the total sum for the later year ($\Sigma P_1 Q_0$) is divided by the total sum for the base year ($\Sigma P_0 Q_0$).

The computation of an unweighted or simple arithmetical index has been finally abandoned by the Bureau since its adoption of the above method.

Statistical Tables.—Weighted monthly index numbers for 1919 to 1923 are presented in Table 26. In Table 27 are shown index numbers by groups of commodities, classified according to chief component materials, for years from 1890 to 1923. The index numbers have been calculated on the basis of the year 1913. Index numbers prior to 1913 are unweighted, but are weighted subsequently to 1913. Weighted index numbers, according to the above classification, are also shown by months from 1919 to 1923 in Table 28.

Index numbers of wholesale prices by years from 1914 to 1923, on a classification according to the purpose for which the commodity is used, are shown in Table 29, by months from 1919 to 1923 in Table 30, and on a classification by origin and degree of manufacture in Tables 31 and 32.

The diagram on page 717 shows the movement of prices from 1890 to 1923. The extraordinary rise after 1913 to the "peak" in 1920 is obvious. All groups, with the exception of non-ferrous metals and non-metallic minerals, will be seen (Table 27) to have attained their highest yearly index number in that year. Diagrams on page 720 show the relative trend of prices of raw and manufactured articles, and of consumers' and producers' goods. (Table 29).

26.—Weighted General Index Numbers, by months, 1919-1923.

(1913=100).

Months.	1919.	1920.	1921.	1922.	1923.
January.....	206.1	233.4	200.6	151.7	151.4
February.....	200.5	238.8	191.1	153.5	153.6
March.....	200.3	241.3	186.0	153.6	155.9
April.....	198.1	251.0	179.5	153.7	156.9
May.....	231.4	256.7	170.5	153.9	155.2
June.....	201.7	255.1	164.5	152.7	155.5
July.....	202.8	256.3	163.7	154.1	153.5
August.....	207.0	255.2	165.5	151.7	153.5
September.....	213.7	245.5	161.7	147.5	154.6
October.....	214.0	236.3	155.6	148.1	153.1
November.....	217.5	224.5	153.6	151.9	153.3
December.....	223.4	217.2	150.6	153.1	153.5
Averages for Years.....	209.2	243.5	171.8	152.0	153.0

27.—Index Numbers of Wholesale Prices in Canada, 1890-1923.

(1890-1913, Unweighted; 1913-1923, Weighted.)

(CHIEF COMPONENT MATERIAL CLASSIFICATION.)

Groups.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.
Vegetable products (grains, fruits, etc.).....	99.8	101.5	89.6	86.3	80.2	82.5	74.6	74.4
Animals and their products.....	62.5	61.3	60.7	64.4	59.0	57.6	54.6	56.5
Fibres, textiles and textile products.....	93.1	87.0	84.9	83.8	78.6	76.8	77.6	77.4
Wood, wood products and paper.....	70.8	70.8	71.5	71.3	71.4	70.1	67.9	67.5
Iron and its products.....	124.9	118.5	114.0	112.3	106.6	100.0	95.0	91.2
Non-ferrous metals and their products.....	112.0	102.0	92.1	85.8	74.5	72.0	72.5	72.3
Non-metallic minerals and their products.....	106.0	103.5	102.6	101.4	98.1	96.2	95.6	94.3
Chemicals and allied products.....	99.4	100.5	95.8	94.7	94.6	93.0	93.1	90.7
Total.....	93.0	91.4	86.2	85.2	80.6	79.6	76.0	75.6

27.—Index Numbers of Wholesale Prices in Canada, 1890-1923—concluded.

(1890-1913, Unweighted; 1913-1923, Weighted.)
(CHIEF COMPONENT MATERIAL CLASSIFICATION.)

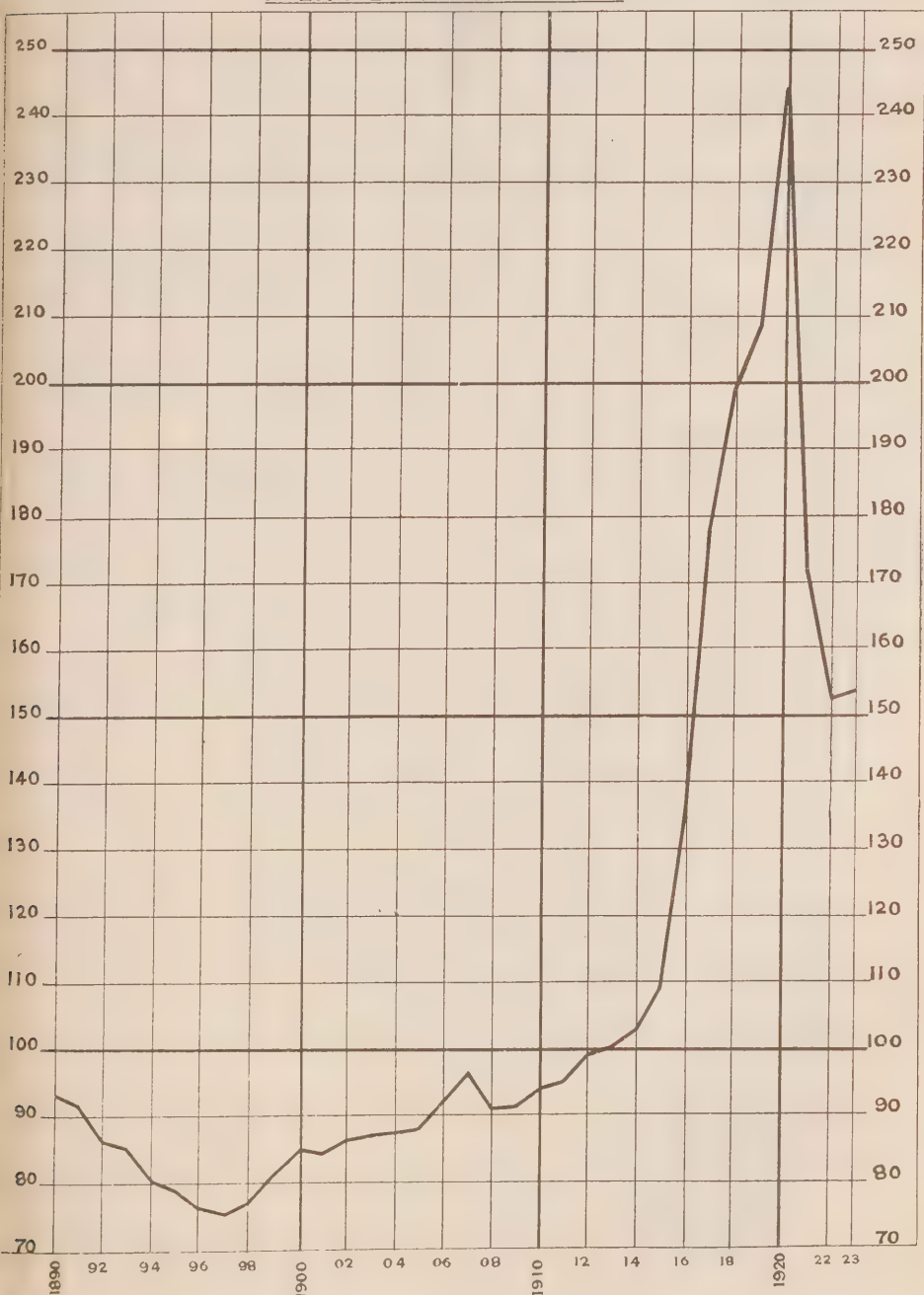
Groups.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.
Vegetable products (grains, fruits, etc.).....	79.7	81.7	84.9	86.1	90.1	89.4	91.2	90.2
Animals and their products.....	59.3	62.0	65.1	66.1	68.4	69.0	68.0	71.9
Fibres, textiles and textile products.....	77.8	81.1	86.1	81.5	81.3	83.1	86.1	88.9
Wood, wood products and paper.....	65.8	67.0	76.0	75.4	77.6	80.1	83.4	84.2
Iron and its products.....	91.3	103.7	115.9	104.8	103.1	103.1	99.5	99.0
Non-ferrous metals and their products.....	76.0	93.1	98.6	94.3	82.1	82.8	81.3	91.0
Non-metallic minerals and their products.....	95.2	97.4	91.5	91.8	96.8	100.3	94.6	92.1
Chemicals and allied products.....	90.4	88.2	95.5	93.3	95.9	96.4	97.8	96.4
Total.....	77.8	81.4	85.8	84.5	86.2	86.9	87.0	87.8

Groups.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.	1914.
Vegetable products (grains, fruits, etc.).....	97.3	136.2	97.2	101.1	105.7	108.6	111.9	100.0	111.6
Animals and their products.....	75.3	78.0	76.9	82.6	87.3	84.8	95.4	100.0	102.5
Fibres, textiles and textile products.....	93.5	96.2	86.7	85.0	87.8	88.8	90.0	100.0	97.8
Wood, wood products and paper.....	87.6	91.0	90.9	89.0	89.5	91.0	92.4	100.0	94.3
Iron and its products.....	101.6	105.9	101.8	97.3	96.9	96.9	97.3	100.0	97.7
Non-ferrous metals and their products.....	111.8	115.1	85.4	82.9	83.5	86.5	98.6	100.0	96.2
Non-metallic minerals and their products....	93.2	92.8	90.2	87.1	88.7	86.1	91.2	100.0	94.5
Chemicals and allied products.....	96.6	97.7	95.1	91.3	93.7	95.3	97.1	100.0	103.0
Total.....	92.6	96.2	90.9	91.4	94.3	95.0	99.5	100.0	102.3

Groups.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.
Vegetable products (grains, fruits, etc.).....	130.2	149.8	214.4	220.2	234.4	287.6	178.2	148.4	144.2
Animals and their products.....	104.4	119.9	155.8	179.4	198.7	204.8	154.6	135.4	134.1
Fibres, textiles and textile products.....	100.2	133.3	196.8	269.9	281.4	303.3	165.0	174.7	200.9
Wood, wood products and paper.....	88.5	100.1	122.4	139.4	171.6	241.6	202.5	166.4	176.8
Iron and its products.....	107.2	151.8	220.2	227.3	201.8	244.4	185.7	151.8	168.0
Non-ferrous metals and their products.....	108.6	137.3	146.2	144.2	135.6	137.7	98.6	98.9	96.8
Non-metallic minerals and their products....	96.4	102.2	126.0	144.9	163.8	197.5	205.4	188.4	183.8
Chemicals and allied products.....	107.4	123.1	154.8	187.3	185.4	223.3	134.7	166.4	164.8
Total.....	109.9	131.6	178.5	199.0	209.2	243.5	171.8	152.0	153.0

THE COURSE OF WHOLESALE PRICES IN CANADA, 1890-1923

AVERAGE PRICES 1913=100



28.—Weighted Index Numbers of Wholesale Prices, by Groups of Commodities and by Months, 1919-1923.

(CHIEF COMPONENT MATERIAL CLASSIFICATION.)
(1913=100.)

Groups and years.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Vegetable products, grains, fruits, etc.—												
1919.....	221.3	217.6	219.4	224.4	232.6	231.8	224.1	232.1	247.3	244.2	248.2	255.7
1920.....	280.5	288.0	294.7	309.3	329.2	332.8	326.2	304.2	281.7	256.7	234.7	216.3
1921.....	206.9	195.5	192.4	185.6	188.7	181.4	178.0	186.5	172.6	152.7	147.5	146.8
1922.....	145.8	157.1	161.5	160.6	161.4	155.9	157.1	148.4	131.3	130.8	137.2	137.8
1923.....	136.8	142.3	144.5	151.2	152.5	150.4	146.8	147.2	143.0	141.6	138.2	135.2
Animals and their products—												
1919.....	193.1	184.6	186.9	194.3	195.8	193.9	197.5	201.2	199.9	199.3	205.7	209.5
1920.....	209.6	209.4	203.3	206.9	204.5	198.8	203.0	203.5	210.6	207.0	203.2	199.2
1921.....	197.9	181.7	175.8	169.9	144.8	134.2	142.0	147.3	144.3	143.1	139.5	149.0
1922.....	136.8	135.0	133.3	136.8	131.2	130.5	133.7	133.3	131.3	133.3	139.8	143.7
1923.....	141.5	139.1	139.9	135.8	126.5	126.9	126.1	127.9	133.0	135.1	137.6	141.6
Fibres, textiles and textile products—												
1919.....	288.6	281.0	283.1	255.3	259.9	267.6	275.9	274.5	291.3	298.2	303.1	310.2
1920.....	315.6	319.5	317.9	341.8	338.9	331.4	328.5	320.1	302.7	282.9	255.3	261.8
1921.....	181.0	177.9	173.3	163.6	153.6	148.6	148.4	143.8	164.3	164.8	173.5	174.1
1922.....	173.0	172.4	167.2	165.6	173.4	176.0	175.9	174.2	174.7	176.6	183.7	184.8
1923.....	189.0	199.3	205.9	202.9	199.2	201.2	198.6	196.2	196.7	197.8	204.1	207.1
Wood, wood products and paper—												
1919.....	165.5	165.2	165.2	164.0	161.4	162.2	168.1	175.1	182.8	185.8	184.4	188.6
1920.....	203.8	213.2	218.4	243.1	245.0	233.9	256.0	252.5	258.8	266.7	259.4	247.1
1921.....	244.4	239.8	231.8	224.7	207.1	199.1	190.6	189.9	180.9	172.1	173.0	172.2
1922.....	166.4	162.0	162.4	162.6	165.1	164.3	166.0	166.3	166.4	171.0	171.0	174.1
1923.....	175.7	174.5	175.3	173.5	175.1	179.8	178.6	177.7	177.9	178.2	178.5	176.4
Iron and its products—												
1919.....	227.1	216.5	206.9	193.0	192.1	188.2	188.2	191.8	190.5	191.1	194.2	208.9
1920.....	212.0	222.0	234.7	232.2	242.9	246.6	243.6	248.1	254.1	254.4	253.0	248.3
1921.....	224.9	215.4	203.6	192.8	189.4	183.5	178.8	169.0	164.8	164.3	158.6	152.0
1922.....	150.3	147.6	146.5	145.1	147.3	149.3	149.6	154.4	159.6	157.9	157.4	156.4
1923.....	158.9	161.8	164.8	169.1	172.5	174.4	171.8	170.3	168.2	167.4	167.5	168.7
Non-ferrous metals and their products—												
1919.....	134.2	127.8	123.3	121.4	126.7	130.2	137.5	141.1	141.8	143.2	146.2	148.3
1920.....	153.4	155.0	153.7	147.5	141.0	129.6	134.3	139.2	133.9	129.0	118.2	112.3
1921.....	116.8	112.1	107.1	109.2	111.3	96.2	96.2	94.9	96.9	99.6	98.8	99.8
1922.....	99.3	97.0	96.2	96.3	97.5	98.9	100.2	99.8	100.7	100.9	100.2	99.5
1923.....	95.5	96.8	102.5	102.5	99.2	98.2	95.4	94.1	94.6	93.8	95.4	95.1
Non-metallic minerals and their products—												
1919.....	164.0	162.0	161.7	162.2	162.0	161.6	162.2	162.9	165.8	165.7	165.7	168.3
1920.....	171.3	175.8	175.8	184.8	187.5	195.8	197.7	201.1	211.1	219.8	227.3	230.6
1921.....	221.9	212.2	212.0	208.8	205.8	206.1	203.9	200.4	198.5	200.1	198.0	196.4
1922.....	191.3	191.0	190.3	190.3	185.8	185.7	187.0	185.4	190.4	189.2	187.1	187.1
1923.....	185.7	184.4	186.1	186.4	182.6	182.3	182.8	183.2	182.8	184.1	182.5	182.5
Chemicals and allied products—												
1919.....	182.2	180.6	182.9	179.4	181.3	183.4	188.6	190.4	190.4	190.1	191.2	192.5
1920.....	201.7	211.7	217.9	219.4	221.8	226.4	233.2	232.9	239.3	238.4	224.8	215.7
1921.....	210.3	206.3	204.0	185.5	180.0	180.0	179.8	177.5	176.7	176.7	174.9	173.9
1922.....	169.5	166.8	166.8	166.2	166.2	166.2	166.1	165.9	165.4	165.6	165.6	165.7
1923.....	166.4	166.3	164.4	164.5	164.2	163.9	165.4	165.7	165.7	164.5	163.8	162.2

29.—Yearly Index Numbers of Groups of Commodities, Classified according to Purpose, 1914-1923.

(1913=100.)

Items.	No. of Commodities.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.
I. Consumers' Goods—	98	101.3	105.9	120.6	154.0	172.8	191.7	226.1	174.4	153.6	151.3
Foods, beverages and tobacco.....	74	105.6	111.0	132.3	177.1	193.3	207.6	244.4	170.7	146.0	147.6
Other consumers' goods (Clothing, furniture, etc.)	24	96.0	99.3	105.8	124.8	146.9	171.6	203.1	179.2	163.1	155.9
II. Producers' Goods—	148	103.4	114.2	130.7	177.4	195.0	206.2	241.9	167.3	146.8	145.0
Producers' equipment.....	16	94.4	96.4	101.1	126.3	146.0	164.6	197.1	206.5	189.0	188.1
Producers' materials.....	132	104.4	116.1	133.9	182.9	200.3	210.7	246.8	163.0	142.2	140.6
Building and construction materials.....	32	93.8	90.3	103.8	130.7	150.5	175.0	214.9	183.2	162.2	167.0
Manufacturers' materials.....	100	106.8	121.9	149.8	194.9	211.7	218.8	254.0	158.4	137.7	134.7

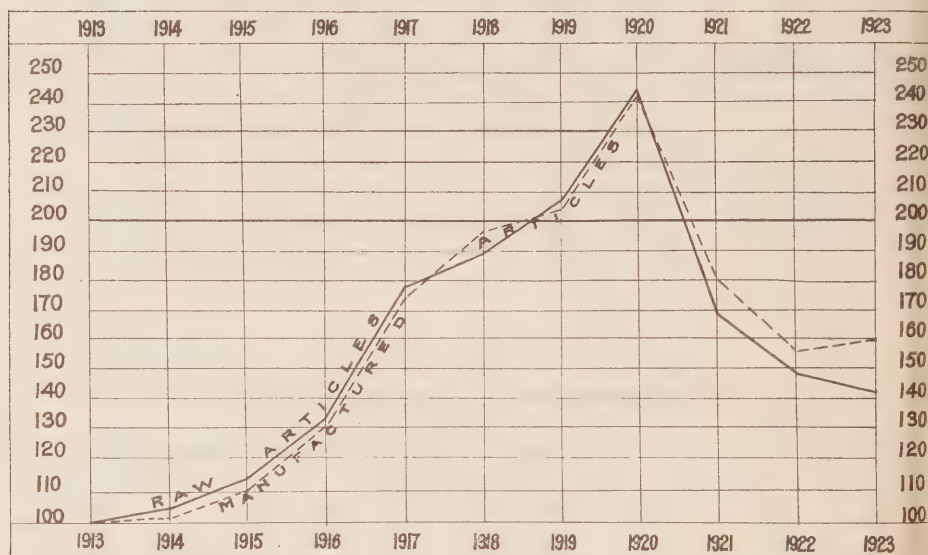
30.—Monthly Index Numbers of Groups of Commodities, Classified according to Purpose, 1919-1923.

(1913=100.)

Items.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Consumers' Goods—												
1919.....	184.9	181.0	182.7	186.4	188.8	187.8	189.1	196.4	197.3	196.5	200.3	204.9
1920.....	216.6	221.1	221.7	230.1	235.3	238.1	238.5	232.5	230.7	223.9	216.8	209.2
1921.....	205.2	194.8	191.1	183.4	170.2	162.5	164.3	168.9	165.1	161.8	158.8	161.7
1922.....	156.2	156.1	155.4	156.0	153.6	152.5	155.0	153.4	149.8	149.3	151.9	151.1
1923.....	153.0	152.4	154.7	154.2	148.7	148.6	148.2	148.9	152.1	152.5	151.9	153.0
Foods, beverages and tobacco—												
1919.....	202.9	195.7	198.0	204.3	207.6	204.3	203.5	209.5	209.3	207.8	214.6	221.1
1920.....	237.4	241.5	241.0	254.0	265.9	264.3	264.5	259.8	240.9	233.8	222.8	211.5
1921.....	207.7	193.3	187.4	181.9	163.5	153.1	158.5	167.6	163.8	156.8	151.5	167.3
1922.....	147.5	149.0	148.7	149.7	145.5	143.9	146.5	145.2	138.8	139.4	146.5	150.2
1923.....	148.1	148.6	150.6	149.6	144.3	144.1	143.4	144.9	150.9	150.1	149.7	152.1
Other consumers' goods—												
1919.....	161.5	162.0	162.7	163.0	164.4	166.3	170.4	179.4	181.4	181.7	181.6	183.7
1920.....	189.4	194.3	195.3	198.9	195.4	203.9	204.4	208.6	217.4	211.0	209.0	206.3
1921.....	202.1	196.9	196.0	185.4	178.9	174.9	172.0	170.8	166.8	168.6	168.5	167.5
1922.....	166.9	164.0	163.6	163.8	163.4	163.2	165.5	163.4	163.4	161.6	158.5	159.0
1923.....	159.3	157.3	159.9	159.9	154.2	154.3	154.3	153.9	153.7	155.6	154.5	154.2
Producers' Goods—												
1919.....	203.2	199.1	199.1	198.9	202.2	203.4	204.2	206.3	215.5	217.4	202.2	222.0
1920.....	236.0	240.3	241.6	257.2	264.7	262.9	263.4	254.7	250.4	235.0	220.7	207.4
1921.....	198.5	189.9	187.1	180.7	176.3	170.9	166.9	166.3	156.3	146.6	145.1	144.7
1922.....	143.4	147.5	149.7	150.9	152.3	150.6	151.5	146.8	134.5	140.8	143.3	143.8
1923.....	143.6	146.7	149.0	151.7	151.7	150.2	147.4	145.6	145.3	143.5	142.5	141.0
Producers' equip- ment—												
1919.....	164.7	162.0	161.6	163.0	162.8	163.0	163.7	164.5	166.6	166.5	166.4	169.3
1920.....	172.0	176.5	177.1	186.5	186.6	195.5	196.0	198.8	209.4	218.4	227.2	230.8
1921.....	221.4	212.6	212.1	209.2	205.5	206.4	204.6	201.7	200.5	202.8	200.5	199.7
1922.....	193.6	191.6	190.6	190.6	185.7	185.7	187.2	185.7	191.2	190.1	188.0	188.0
1923.....	188.3	187.0	188.8	188.8	184.5	184.3	184.4	184.7	185.0	186.4	185.2	185.3
Producers' materials—												
1919.....	207.3	203.1	203.2	202.8	206.4	207.7	208.5	210.7	220.7	222.9	223.8	227.7
1920.....	242.9	247.1	248.5	264.8	273.0	270.1	270.6	260.6	254.8	236.7	220.1	204.9
1921.....	196.0	187.5	184.4	177.7	173.2	167.1	162.8	162.5	151.5	140.6	139.1	138.8
1922.....	138.0	142.8	145.3	146.7	148.7	146.8	147.7	142.6	135.0	135.5	138.5	139.0
1923.....	138.8	142.4	144.8	147.8	148.2	146.5	143.5	141.5	141.1	139.0	137.9	136.2
Building, etc., materials—												
1919.....	173.3	171.9	170.1	165.4	163.3	165.0	171.8	179.6	186.5	186.3	184.8	190.4
1920.....	200.7	209.6	214.0	229.4	225.8	214.0	213.1	210.4	219.4	218.8	213.6	210.1
1921.....	213.4	205.9	204.3	194.7	185.6	178.9	178.2	175.5	167.7	165.3	165.4	163.6
1922.....	163.2	159.9	160.2	159.5	162.5	161.8	163.3	163.6	162.9	162.6	163.0	164.0
1923.....	163.8	164.7	166.4	166.4	167.4	168.4	169.4	167.9	166.7	167.0	167.3	166.3
Manufacturers' materials—												
1919.....	213.2	208.3	208.9	209.5	214.5	215.7	215.1	216.0	226.7	229.4	230.9	234.4
1920.....	250.8	253.9	254.6	271.1	282.1	281.3	282.1	270.4	261.1	236.9	217.6	199.7
1921.....	192.0	183.2	179.7	173.7	170.2	162.3	157.2	157.5	145.8	132.8	131.0	131.0
1922.....	132.2	138.9	141.8	143.7	145.5	143.4	144.1	137.8	128.6	129.3	132.9	133.3
1923.....	133.2	137.4	139.9	143.6	143.9	141.1	137.6	135.5	135.3	132.7	131.3	129.5

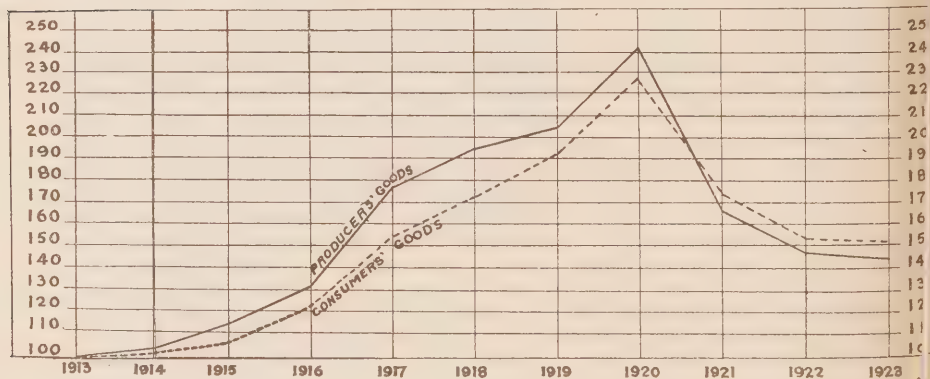
RAW AND MANUFACTURED ARTICLES

AVERAGE PRICES 1913=100



CONSUMERS' AND PRODUCERS' GOODS 1913-1923

AVERAGE PRICES 1913=100



31.—Yearly Price Index Numbers of Groups of Commodities, Classified According to Origin, 1914-1923.

(1913=100.)

Items.	No. of Commodities.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.
Total raw or partly manufactured.....	108	104.2	113.9	133.4	178.4	189.2	206.0	244.0	168.4	148.5	142.8
Total fully or chiefly manufactured.....	130	101.0	110.9	130.4	175.5	196.9	204.4	242.0	180.0	155.0	159.1
Articles of farm origin (domestic and foreign)—											
Field (grains, fruit, cotton, etc.)—											
(a) Raw or partly manufactured.....	46	112.9	133.8	154.6	224.0	227.7	248.8	302.8	174.3	147.7	143.2
(b) Fully or chiefly manufactured.....	42	107.6	122.8	143.0	200.1	228.1	234.7	293.6	184.8	159.1	168.9
(c) Total.....	88	109.5	125.5	146.4	209.9	225.4	239.2	291.1	177.5	152.9	153.4
Animal—											
(a) Raw or partly manufactured.....	25	105.0	103.4	119.8	157.0	184.2	200.7	201.4	143.4	130.6	124.4
(b) Fully or chiefly manufactured.....	28	98.8	107.3	126.4	165.4	185.7	208.4	215.6	166.7	142.1	146.6
(c) Total.....	53	102.9	105.6	122.5	159.9	184.5	203.0	208.2	155.7	135.6	135.7
Canadian farm products—											
(1) Field (grains, etc.)..	20	115.1	136.4	156.9	238.2	234.1	252.7	295.3	177.9	144.3	130.0
(2) Animal.....	16	102.9	103.1	120.2	155.2	174.9	197.9	194.6	140.8	128.6	123.5
(3) Total.....	36	110.6	124.1	143.4	207.7	212.3	232.5	258.2	164.2	138.5	127.6
Articles of marine origin—											
(a) Raw or partly manufactured.....	2	91.5	92.4	102.4	126.5	151.4	162.4	169.9	116.4	114.7	126.5
(b) Fully or chiefly manufactured.....	6	100.9	102.5	108.4	139.8	178.5	181.8	174.6	149.7	150.7	130.9
(c) Total.....	8	98.8	100.3	107.1	136.8	172.5	177.5	173.5	142.3	142.7	129.9
Articles of forest origin—											
(a) Raw or partly manufactured.....	16	92.2	85.2	99.0	119.5	133.3	166.3	234.2	184.3	158.3	168.8
(b) Fully or chiefly manufactured.....	5	102.8	101.6	104.5	134.1	164.1	193.1	271.2	275.4	199.1	208.6
(c) Total.....	21	94.3	88.5	100.1	122.4	139.4	171.6	241.6	202.5	166.4	176.8
Articles of mineral origin—											
(a) Raw or partly manufactured.....	19	96.2	106.8	130.1	155.1	162.1	164.4	195.5	174.1	161.4	164.7
(b) Fully or chiefly manufactured.....	49	95.0	101.3	122.8	160.3	173.7	171.6	201.0	173.8	153.4	151.5
(c) Total.....	68	95.8	101.9	121.5	153.2	166.1	167.8	196.2	175.6	158.0	157.9

32.—Weighted Index Numbers of Wholesale Prices, by Origin and Degree of Manufacture, by Months, 1919-1923.

Origins and years.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
I. Articles of Farm Origin (domestic and foreign)—												
A. Field (grain, fruit, cotton, etc.).												
Raw or partly manufactured—												
1919.....	230.2	226.7	230.3	235.8	245.5	245.3	237.2	243.6	264.5	266.7	272.8	280.3
1920.....	305.4	314.1	315.3	344.2	367.4	364.5	344.3	309.8	283.6	247.6	231.0	211.6
1921.....	206.7	193.4	191.7	181.7	182.5	175.3	173.7	183.4	166.7	146.1	143.9	142.0
1922.....	141.5	155.6	160.0	161.2	164.4	158.4	160.1	146.1	128.3	129.7	136.8	136.9
1923.....	134.5	141.5	145.5	152.9	152.7	150.4	145.6	145.0	146.2	139.1	137.3	133.9
Fully or chiefly manufactured—												
1919.....	236.3	232.4	231.6	222.8	224.4	226.4	229.3	233.1	244.6	244.1	243.3	246.6
1920.....	275.4	277.0	285.4	304.4	317.0	324.2	336.2	325.6	311.0	290.7	251.1	224.7
1921.....	204.1	201.9	199.2	195.7	192.3	188.7	184.1	184.9	178.5	164.9	160.4	160.5
1922.....	153.5	162.7	165.5	162.0	161.0	159.2	161.1	162.2	152.2	150.6	156.3	153.2
1923.....	159.6	168.0	171.8	175.2	175.4	171.6	169.9	165.8	163.2	167.9	164.8	164.2

2.—Weighted Index Numbers of Wholesale Prices, by Origin and Degree of Manufacture, by Months, 1919-1923—con.

Origins and Years.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
I. Articles of Farm Origin (domestic and foreign)—con.												
A. Field (grain, fruit, cotton, etc.)—con.												
Total—												
1919.....	230.3	226.0	227.8	227.0	234.1	234.8	230.5	236.8	252.3	250.7	254.3	260.9
1920.....	283.5	290.3	296.4	313.4	330.1	335.0	329.1	309.6	288.8	264.5	239.5	218.2
1921.....	203.4	194.0	190.7	184.8	183.4	178.6	175.7	182.3	172.9	156.0	152.8	152.4
1922.....	150.9	160.0	161.7	163.2	158.9	160.1	153.0	139.0	138.3	144.8	144.5	145.5
1923.....	145.4	151.8	154.8	159.9	160.3	158.6	155.2	154.8	155.7	150.9	148.9	146.8
B. Animal.												
Raw or partly manu- factured—												
1919.....	197.9	186.2	187.5	196.0	195.0	195.4	201.2	207.4	201.4	201.3	206.8	208.9
1920.....	211.1	210.8	202.1	204.3	198.6	189.7	196.4	194.7	206.1	202.2	198.2	194.4
1921.....	197.0	170.0	159.0	151.7	135.3	125.0	128.0	134.1	123.3	130.9	128.0	143.3
1922.....	132.7	131.0	125.7	128.2	126.6	127.0	130.4	127.4	125.0	128.2	136.1	139.9
1923.....	132.8	127.9	121.9	122.1	119.9	118.3	117.9	119.9	122.6	126.6	130.5	135.8
Fully or chiefly manu- factured—												
1919.....	192.6	189.6	193.4	205.1	205.1	210.7	214.4	220.5	218.3	213.5	216.9	219.5
1920.....	219.5	218.2	215.8	220.2	220.3	218.6	219.5	220.1	219.5	213.7	205.6	198.0
1921.....	194.2	193.5	196.3	189.2	152.1	142.3	157.6	162.6	159.4	152.1	147.5	148.6
1922.....	139.5	140.2	143.7	148.9	137.8	137.8	141.3	142.8	140.9	140.6	144.0	148.3
1923.....	152.2	155.0	164.8	156.3	136.7	137.0	135.9	139.3	147.9	145.4	143.6	144.7
Total—												
1919.....	198.0	189.6	191.7	200.2	201.3	199.8	203.7	207.9	206.6	205.8	211.9	215.9
1920.....	214.3	213.8	207.4	210.6	207.7	202.4	206.4	207.1	213.2	209.4	205.7	200.6
1921.....	199.6	183.8	178.3	171.4	145.4	134.0	142.4	147.9	144.4	142.9	139.0	148.4
1922.....	136.6	134.9	133.3	137.1	130.9	130.8	134.0	133.4	131.8	134.3	140.8	145.2
1923.....	142.7	140.8	141.9	138.1	127.7	128.2	127.5	129.5	135.1	137.1	139.0	143.0
C. Canadian Farm Products.												
(1) Field (grains, etc.)—												
1919.....	232.5	229.9	232.8	239.6	251.2	250.9	236.4	244.8	271.0	266.4	274.1	281.9
1920.....	298.2	307.4	311.5	324.3	345.6	344.7	327.4	303.0	282.5	254.4	235.0	219.7
1921.....	212.5	197.1	194.8	183.8	186.4	184.4	180.5	194.0	172.0	144.8	141.6	139.3
1922.....	141.0	153.0	163.1	164.6	167.1	157.5	158.5	140.9	119.2	118.3	126.2	125.7
1923.....	124.3	128.5	130.6	139.9	140.6	139.3	132.7	137.3	134.0	122.3	119.7	116.6
(2) Animal—												
1919.....	194.7	183.7	179.2	188.5	185.3	190.0	198.2	212.3	205.3	210.0	218.9	221.5
1920.....	218.5	211.2	202.0	196.5	187.1	177.9	184.9	183.7	202.4	199.0	195.8	199.1
1921.....	198.9	170.9	155.3	139.5	123.5	121.1	124.9	133.2	128.8	137.8	140.4	155.0
1922.....	136.4	134.7	120.5	122.5	116.9	131.9	120.8	120.1	120.5	131.2	145.6	145.5
1923.....	135.0	128.5	122.0	119.6	118.4	109.3	108.8	114.1	119.8	124.2	134.9	144.9
(3) Total—												
1919.....	218.6	212.9	213.1	220.8	227.0	228.0	222.4	232.9	246.9	245.7	253.8	259.7
1920.....	268.9	272.1	271.3	277.3	287.4	281.7	275.1	259.2	253.1	234.1	220.6	212.1
1921.....	207.5	187.5	180.3	167.5	163.3	161.2	160.1	171.7	158.1	142.3	141.2	145.1
1922.....	139.3	149.4	147.4	149.1	148.6	141.5	144.6	133.2	119.7	123.0	133.3	133.0
1923.....	128.2	128.5	127.4	132.4	132.4	128.3	123.9	128.8	128.8	123.0	126.3	127.0
II. Articles of Marine Origin—												
Raw or partly manu- factured—												
1919.....	169.9	166.0	147.7	152.5	192.6	159.3	161.2	159.8	161.8	152.2	157.9	167.9
1920.....	161.2	160.2	160.2	160.2	188.7	171.0	171.0	171.0	171.0	171.0	171.0	171.0
1921.....	134.8	102.0	102.0	146.3	136.3	101.7	84.3	84.3	127.5	127.5	137.5	137.5
1922.....	116.3	112.5	117.5	102.5	129.4	114.0	114.0	117.9	116.7	104.0	121.7	114.0
1923.....	111.3	111.3	116.3	124.0	166.4	156.3	119.8	120.9	119.8	124.8	124.8	122.9
Fully or chiefly manu- factured—												
1919.....	189.2	189.2	200.2	177.3	178.9	189.6	179.8	172.2	167.8	172.7	182.9	182.7
1920.....	177.8	179.3	179.3	178.8	182.4	162.0	167.0	173.8	183.9	182.9	159.7	167.5
1921.....	159.2	160.4	149.4	143.7	143.2	155.6	148.9	145.2	143.3	147.4	147.4	149.7
1922.....	152.3	152.9	152.5	152.5	159.6	157.7	152.5	158.3	149.7	140.0	142.1	138.4
1923.....	138.3	132.2	129.6	129.9	119.9	129.9	135.1	133.3	122.7	125.7	132.2	132.2
Total—												
1919.....	184.9	184.0	188.6	171.8	182.0	182.8	175.7	169.5	166.4	168.2	177.4	179.4
1920.....	174.1	175.0	175.0	174.7	183.8	164.0	167.9	173.2	181.0	180.3	162.2	168.2
1921.....	148.2	147.4	139.3	144.3	136.1	132.5	134.6	126.1	139.8	143.5	145.7	147.0
1922.....	144.3	143.9	144.7	141.3	152.9	148.0	149.3	149.3	142.4	132.0	137.6	133.0
1923.....	132.3	127.6	126.7	128.6	138.0	135.7	130.1	130.5	122.1	125.5	130.6	130.1

32.—Weighted Index Numbers of Wholesale Prices, by Origin and Degree of Manufacture, by Months, 1919-1923—concluded.

Origins and years.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
III. Articles of Forest Origin—												
Raw or partly manufactured—												
1919.....	158.8	158.4	158.4	156.8	153.6	154.5	161.9	170.4	180.0	183.9	182.2	187.3
1920.....	199.5	211.3	217.6	248.3	250.6	236.7	246.0	241.6	249.3	247.1	237.8	222.7
1921.....	219.4	213.7	216.0	207.2	185.1	175.2	173.9	172.9	161.7	159.9	161.1	160.0
1922.....	159.0	153.5	153.9	154.2	157.3	156.4	158.5	158.8	159.0	161.7	161.7	165.5
1923.....	167.6	166.0	167.0	164.8	166.7	172.6	171.1	170.0	170.3	170.6	171.0	168.4
Fully or chiefly manufactured—												
1919.....	192.4	192.4	192.4	192.7	192.7	193.2	193.2	193.6	193.6	193.6	193.6	193.6
1920.....	220.7	220.7	221.7	222.3	222.3	222.3	296.3	296.3	296.4	345.5	345.5	344.7
1921.....	344.7	344.3	295.1	205.1	205.1	204.6	257.9	257.9	257.9	220.7	220.7	220.7
1922.....	196.1	196.1	196.1	196.1	196.0	196.0	196.2	196.2	196.2	208.5	208.5	208.5
1923.....	208.5	208.5	208.5	208.5	208.6	208.6	208.6	208.6	208.6	208.6	208.6	208.6
Total—												
1919.....	165.5	165.2	165.2	164.0	161.4	162.2	168.1	175.1	182.8	185.8	184.5	188.6
1920.....	203.8	213.2	213.4	243.1	245.0	233.0	256.0	252.5	258.8	266.7	259.3	247.1
1921.....	244.4	239.8	231.8	224.7	207.1	199.1	190.6	189.9	180.9	172.1	173.0	172.2
1922.....	166.4	162.0	162.4	162.6	165.1	164.3	166.0	166.3	166.4	171.0	171.0	174.1
1923.....	175.7	174.5	175.3	173.5	175.1	179.8	178.6	177.7	177.9	178.2	178.5	176.4
IV. Articles of Mineral Origin—												
Raw or partly manufactured—												
1919.....	167.6	161.7	157.5	156.9	159.2	159.1	161.5	164.4	165.1	166.4	170.0	179.3
1920.....	181.3	187.5	191.1	193.1	191.8	193.0	194.8	200.0	204.8	207.3	208.4	207.0
1921.....	199.2	188.9	184.8	180.7	180.9	173.0	170.9	167.7	168.3	169.0	166.0	165.0
1922.....	161.0	158.8	159.2	158.7	156.6	157.9	158.4	162.0	168.8	166.9	165.3	164.3
1923.....	163.3	164.8	168.4	169.1	167.6	167.2	164.3	163.1	162.5	162.8	160.9	161.7
Fully or chiefly manufactured—												
1919.....	181.4	176.9	172.8	166.2	166.1	165.7	169.0	170.4	172.0	171.7	171.6	175.1
1920.....	181.6	186.3	189.9	192.9	199.0	203.2	204.6	208.2	213.9	213.5	211.7	208.0
1921.....	201.5	193.7	188.1	182.2	177.5	173.5	169.1	163.5	159.9	161.6	159.5	156.6
1922.....	154.8	153.9	153.4	152.3	152.9	153.3	155.0	153.4	154.5	153.9	152.2	151.8
1923.....	151.3	150.7	153.0	154.7	151.7	151.8	151.9	151.8	151.0	150.1	150.0	150.0
Total—												
1919.....	174.5	169.7	165.8	162.1	163.1	163.0	165.3	167.3	168.6	168.9	170.1	174.9
1920.....	179.4	184.5	187.6	190.4	193.3	196.2	197.8	201.6	207.3	209.5	209.7	208.0
1921.....	198.3	189.9	185.7	181.0	178.3	175.5	173.0	168.4	166.6	167.8	165.2	163.0
1922.....	159.5	158.2	157.5	157.0	156.0	156.6	157.7	157.4	160.5	159.7	158.3	157.9
1923.....	156.9	157.0	159.6	160.8	158.6	158.7	158.0	157.6	157.1	157.1	156.4	156.8
All raw or partly manufactured—												
1919.....	199.3	193.6	194.1	197.7	202.3	201.4	201.3	206.9	214.6	216.2	220.4	226.8
1920.....	239.6	245.8	246.0	261.5	268.9	264.4	260.0	247.6	242.7	229.1	221.2	210.9
1921.....	203.3	188.8	184.9	177.5	171.4	163.2	162.5	166.4	158.0	151.2	149.2	151.6
1922.....	146.5	150.4	151.2	152.1	152.9	150.8	152.6	147.4	141.6	142.7	146.9	143.0
1923.....	142.8	144.2	145.5	148.2	148.0	147.3	144.4	144.2	145.2	143.1	142.9	142.7
All fully or chiefly manufactured—												
1919.....	204.9	201.2	200.4	196.8	197.4	199.3	202.3	205.4	209.8	208.6	209.1	212.2
1920.....	226.6	228.6	232.6	242.0	249.3	252.7	260.8	258.3	254.6	247.2	229.3	216.4
1921.....	204.9	201.1	196.8	191.8	181.0	176.3	174.8	174.1	169.6	162.2	158.8	155.0
1922.....	154.7	156.1	157.7	157.0	154.7	154.1	156.1	156.3	152.3	151.8	154.1	155.5
1923.....	156.7	160.2	164.4	164.6	159.7	158.3	157.6	156.6	158.8	157.9	156.4	156.4

2.—Retail Prices.

Statistics of retail prices in Canada have been published by the Department of Labour since 1910, the retail prices of the principal staple foods, of coal, wood and coal oil and also the prevailing rates for the rent of six-roomed houses being published in the Labour Gazette each month for the cities having a population of 10,000 or more, some sixty in number. Figures for December, 1900, and December, 1905, were also secured in a special investigation in 1914.

In addition to the statistics of retail prices of food and fuel and of rates of rent, the Department, in 1920 and subsequent years, has secured figures of retail prices of staple lines of clothing, including footwear, from retail dealers throughout Canada, for each year back to 1913. From these quotations the percentages of changes in the cost of clothing have been calculated. Information was also secured as to the prices of household supplies, furniture, furnishings, etc., and an estimate has been made of the percentage changes in the cost of miscellaneous items, the information thus gathered showing that such changes are approximately equal to the average changes in other items. The percentage changes in food, fuel and rent have been calculated from the weekly budgets published in the *Labour Gazette* from month to month, and Table 33 summarizes the yearly and quarterly changes by groups, the figures for each group and for all items being weighted according to the family budget method.

From July, 1920, to June, 1921, food and clothing prices fell steeply, and fuel slightly, while rent advanced. Food recovered in August and September, 1921, but by December was back to June levels. The decline continued until June, 1922, since when the changes have been mostly seasonal, being highest in March, 1923, and low in July. Fuel declined slowly from the middle of 1921 to July, 1922, when it began to advance, reaching a peak in February, 1923. Since then the decline has been slight. Clothing and rent have shown little change in cost since 1921.

33.—Index Numbers of the Cost of Living in Canada, based upon weighted Retail Prices, 1910-1924.

(Average Prices, 1913=100.)

Dates.	Food.	Fuel.	Rent.	Clothing.	Sundries.	Total.
December, 1910.....	96	96	72	92	94	90
December, 1911.....	101	92	70	93	95	91
December, 1912.....	105	102	82	97	97	97
December, 1913.....	106	98	101	100	100	102
March, 1914.....	105	100	100	105	100	102
June, 1914.....	102	99	102	105	100	102
September, 1914.....	107	99	97	110	100	103
December, 1914.....	108	98	92	110	100	102
March, 1915.....	107	98	89	117	103	103
June, 1915.....	106	93	87	117	103	101
September, 1915.....	105	97	85	125	105	103
December, 1915.....	111	97	84	125	105	104
March, 1916.....	114	97	83	134	108	107
June, 1916.....	116	98	85	134	108	108
September, 1916.....	122	101	86	143	110	113
December, 1916.....	138	110	86	143	110	119
March, 1917.....	146	119	88	155	128	128
June, 1917.....	162	125	92	155	128	135
September, 1917.....	159	128	93	167	145	140
December, 1917.....	167	133	94	167	145	143
March, 1918.....	172	143	96	182	153	150
June, 1918.....	174	144	100	182	153	152
September, 1918.....	181	153	101	198	160	159
December, 1918.....	186	163	102	198	160	162
March, 1919.....	178	159	103	216	170	163
June, 1919.....	187	155	110	216	170	168
September, 1919.....	195	162	114	234	180	176
December, 1919.....	201	166	117	234	180	179

33.—Index Numbers of the Cost of Living in Canada, based upon weighted Retail Prices, 1910-1924—concluded.

(Average Prices, 1913=100.)

Dates.	Food.	Fuel.	Rent.	Clothing.	Sundries.	Total.
March, 1920.....	218	173	120	260	185	191
June, 1920.....	231	186	133	260	190	201
September, 1920.....	217	285	136	260	190	199
December, 1920.....	202	218	139	235	190	192
March, 1921.....	180	208	139	195	188	177
June, 1921.....	152	197	143	173	181	163
September, 1921.....	161	189	145	167	170	162
December, 1921.....	150	186	145	153	166	156
March, 1922.....	144	181	145	155	164	153
June, 1922.....	139	179	146	155	164	151
September, 1922.....	140	190	147	155	164	153
December, 1922.....	142	187	146	155	164	153
March, 1923.....	147	190	147	155	164	155
June, 1923.....	139	182	147	155	164	152
September, 1923.....	142	183	147	155	164	153
December, 1923.....	146	185	146	155	164	154
March, 1924.....	144	181	146	155	164	153
June, 1924.....	133	176	146	155	164	149
September, 1924.....	140	176	147	155	164	151
December, 1924.....	144	175	146	155	164	152

The Dominion Bureau of Statistics, in addition to collecting and compiling wholesale prices, also collects the retail prices of over 80 commodities in some sixty cities in Canada. These are averaged by the Bureau with certain prices received through correspondents of the Labour Department, and are then handed over to the latter for insertion in the "Labour Gazette." The Labour Department also compiles a family budget from this material, together with data on fuel, lighting and rents collected by its own correspondents. The Bureau has made use of this material to obtain the tables which follow; the index numbers which they contain are the result of a special compilation made by the Bureau.

Table 34 shows the prices from 1915 to 1923 of the items which were included in the family budget and the index numbers of groups. The index numbers are weighted with the quantities used by the Department of Labour in computing their monthly family budget. Table 35 gives the group indexes by provinces.

An examination of the tables reveals the course of the budget, consisting of food, fuel, lighting and rents, over the period shown. The Dominion index for 1915 indicates a slight fall from 1914. From that year until 1920 the upward movement proceeds with only an occasional check. Early in 1919 there was a slight fall, but it was quickly succeeded by a steady rise to July, 1920, which was the peak month in retail prices (May, 1920, being the peak month in wholesale prices). The index then stood at 190.8 as compared with 100 in 1913. It fell to 152.8 in July, 1921, then rose slightly for some months, but afterwards began to decline again, reaching 152.4 in December, 1921.

In 1922 the cost of living declined still further, reaching 145.8 in May, but after that month rose again until an index of 148.7 was attained in December. The average for the year was 148.9. The tendency in 1923 was toward slightly higher levels. In March the index was 152.2; by July it had dropped to 146.4; and by December it had risen to 150.4. The average for the year was 149.4.

34.—Prices and Index Numbers of a Family Budget of Staple Foods, Fuel and

(DOMINION AVERAGE)

Commodities.	Quantity.	Base, 1913.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.
		\$	\$	\$	\$	\$	\$	\$	\$	\$
1 Beef, sirloin steak.....	1 lb.	·222	·238	·252	·301	·364	·374	·389	·332	·292
2 Beef, chuck, roast.....	1 "	·148	·164	·170	·207	·260	·257	·251	·197	·162
3 Veal, roast.....	1 "	·157	·175	·187	·227	·272	·270	·274	·226	·188
4 Mutton, roast.....	1 "	·191	·209	·233	·281	·347	·348	·354	·292	·273
5 Pork, fresh, roast.....	1 "	·195	·192	·220	·296	·364	·384	·397	·328	·295
6 Pork, salt mess.....	1 "	·176	·177	·194	·268	·340	·359	·362	·309	·265
7 Bacon, breakfast.....	1 "	·247	·256	·288	·385	·494	·579	·559	·497	·412
8 Lard, pure leaf.....	1 "	·192	·178	·202	·297	·359	·392	·380	·239	·221
9 Eggs, fresh.....	1 doz.	·337	·327	·380	·489	·565	·621	·709	·529	·447
10 Eggs, storage.....	1 "	·281	·286	·327	·424	·489	·544	·608	·479	·390
11 Milk.....	1 qt.	·086	·088	·088	·104	·123	·138	·151	·139	·121
12 Butter, dairy.....	1 lb.	·292	·310	·344	·432	·485	·564	·631	·447	·378
13 Butter, creamery.....	1 "	·339	·354	·385	·480	·538	·630	·696	·519	·440
14 Cheese, old.....	1 "	·205	·237	·260	·330	·333	·383	·406	·369	·303
15 Cheese, new.....	1 "	·191	·216	·242	·304	·310	·361	·383	·335	·279
16 Bread, plain, white.....	1 "	·041	·047	·050	·070	·078	·079	·093	·081	·069
17 Flour, family.....	1 "	·032	·040	·042	·064	·068	·067	·079	·062	·047
18 Rolled oats.....	1 "	·044	·051	·049	·061	·079	·077	·084	·063	·056
19 Rice, good, medium.....	1 "	·057	·056	·066	·081	·114	·130	·164	·108	·098
20 Beans, handpicked.....	1 "	·062	·075	·098	·149	·168	·122	·117	·091	·087
21 Apples, evaporated.....	1 "	·120	·119	·134	·156	·223	·242	·286	·221	·234
22 Prunes, medium.....	1 "	·119	·125	·131	·154	·180	·219	·270	·198	·193
23 Sugar, granulated.....	1 "	·059	·080	·090	·100	·113	·123	·197	·114	·087
24 Sugar, yellow.....	1 "	·055	·072	·083	·093	·105	·115	·185	·109	·082
25 Tea, black.....	1 "	·356	·376	·396	·460	·572	·628	·644	·556	·560
26 Tea, green.....	1 "	·372	·360	·408	·432	·548	·624	·672	·608	·602
27 Coffee.....	1 "	·376	·360	·396	·404	·436	·524	·608	·560	·535
28 Potatoes.....	1 pk.	·150	·169	·294	·446	·346	·359	·658	·283	·235
29 Vinegar, white wine.....	1 pt.	·064	·064	·064	·064	·072	·072	·080	·080	·078
30 All Foods.....	\$	7·337	7·866	8·793	11·42	13·01	13·88	15·99	12·10	10·394
31 Index Number.....	—	100·0	107·2	119·8	155·6	177·3	189·2	217·9	164·9	141·7
32 Starch, laundry.....	1 lb.	·096	·096	·099	·120	·141	·144	·144	·138	·122
33 Coal, anthracite.....	1 ton	8·80	8·43	7·36	10·72	11·98	12·86	17·04	18·18	17·713
34 Coal, bituminous.....	1 "	6·19	5·89	6·30	8·43	9·54	10·00	12·38	12·70	11·436
35 Wood, hard, best.....	1 cord	6·80	5·89	6·86	8·46	11·30	12·34	13·09	13·79	12·564
36 Wood, soft.....	1 "	4·90	4·93	4·93	6·22	8·35	9·12	10·14	10·26	9·380
37 Coal oil.....	1 gal.	·237	·233	·230	·250	·273	·287	·365	·354	·313
38 Fuel and lighting, index number.....	—	100·0	95·7	100·9	124·1	149·6	160·6	192·1	199·0	183·6
39 Rent, 1 month.....	\$	19·32	16·49	16·14	17·28	18·88	20·80	24·80	27·08	27·74
40 Index Number.....	—	100·0	85·3	83·5	89·4	97·7	107·7	128·4	140·2	143·6
41 Grand Total.....	\$	14·104	13·844	14·781	18·145	20·637	22·169	25·908	22·706	20·877
42 Index Number.....	—	100·0	98·4	104·8	128·7	146·3	157·3	183·7	161·0	148·9

Lighting and Rent, in Sixty Cities in Canada, 1915-1922, and by Months for 1923.

FOR 1913=100.)

1923.													No.
Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
•267	•273	•275	•273	•280	•293	•298	•300	•295	•291	•278	•269	•283	1
•145	•149	•151	•151	•151	•158	•160	•160	•154	•153	•150	•144	•152	2
•183	•183	•185	•179	•179	•182	•183	•180	•184	•185	•185	•179	•182	3
•272	•274	•276	•281	•276	•285	•282	•280	•279	•280	•266	•270	•277	4
•267	•266	•265	•260	•261	•266	•266	•266	•272	•272	•259	•246	•264	5
•258	•253	•257	•253	•252	•251	•252	•250	•253	•255	•252	•243	•252	6
•408	•406	•403	•400	•391	•391	•391	•392	•389	•393	•386	•375	•394	7
•228	•227	•228	•225	•226	•226	•224	•221	•224	•229	•231	•230	•231	8
•633	•553	•523	•363	•334	•315	•312	•324	•383	•443	•520	•601	•442	9
•466	•432	•419	•317	•306	•295	•273	•286	•340	•397	•440	•470	•370	10
•119	•120	•119	•116	•116	•114	•115	•114	•115	•117	•120	•122	•117	11
•405	•412	•458	•483	•401	•361	•342	•345	•364	•392	•406	•417	•399	12
•455	•472	•535	•553	•444	•400	•393	•393	•414	•442	•449	•461	•451	13
•307	•328	•343	•358	•346	•312	•301	•303	•312	•335	•338	•334	•326	14
—	—	—	—	—	—	—	—	—	—	—	—	—	15
•067	•067	•068	•067	•067	•068	•067	•067	•068	•068	•068	•067	•067	16
•044	•045	•044	•045	•045	•045	•044	•044	•044	•044	•043	•043	•044	17
•055	•055	•055	•056	•055	•055	•055	•055	•055	•055	•056	•055	•055	18
•105	•104	•103	•103	•103	•103	•103	•103	•102	•105	•105	•104	•104	19
•085	•085	•085	•087	•087	•088	•087	•089	•088	•088	•087	•087	•087	20
•216	•217	•210	•206	•203	•188	•197	•197	•196	•195	•189	•187	•200	21
•190	•190	•192	•188	•186	•185	•186	•185	•184	•182	•177	•169	•185	22
•096	•098	•114	•120	•128	•126	•125	•123	•113	•121	•122	•120	•117	23
•091	•093	•108	•114	•122	•120	•119	•118	•108	•115	•116	•116	•112	24
•596	•612	•620	•644	•656	•664	•664	•668	•680	•684	•692	•688	•656	25
—	—	—	—	—	—	—	—	—	—	—	—	—	26
•536	•536	•536	•536	•540	•540	•540	•552	•536	•540	•544	•536	•539	27
•195	•199	•204	•202	•215	•245	•263	•434	•332	•264	•233	•236	•252	28
•080	•072	•080	•080	•072	•072	•080	•072	•072	•072	•072	•080	•075	29
10-52	10-53	10-79	10-64	10-36	10-23	10-17	10-53	10-46	10-65	10-69	10-73	10-525	30
143-4	143-5	147-1	145-0	141-2	139-4	138-6	143-5	142-6	145-2	145-7	146-2	143-5	31
•120	•138	•120	•120	•120	•120	•120	•120	•120	•120	•123	•123	•122	32
18-416	18-704	18-880	18-512	17-840	17-296	17-248	17-408	17-792	17-840	17-920	18-016	17-989	33
11-840	11-920	11-936	11-872	11-584	11-248	11-312	11-280	11-328	11-456	11-440	11-440	11-555	34
12-896	12-944	12-768	12-784	12-720	12-768	12-832	12-800	12-688	12-576	12-704	12-688	12-764	35
9-504	9-680	9-504	9-520	9-504	9-568	9-440	9-536	9-424	9-472	9-536	9-456	9-512	36
•316	•312	•314	•315	•312	•303	•302	•304	•304	•303	•301	•302	•307	37
189-0	190-6	190-0	189-0	185-3	182-2	182-2	182-7	183-8	183-8	184-8	184-8	185-7	38
28-04	28-04	28-04	27-68	27-84	27-88	27-88	27-88	27-84	27-84	27-72	27-68	27-86	39
145-1	145-1	145-1	143-3	144-1	144-3	144-3	144-3	144-1	144-1	143-5	143-3	144-2	40
21-13	21-17	21-47	21-21	20-90	20-72	20-65	21-03	20-97	21-16	21-19	21-21	21-068	41
149-8	150-1	152-2	150-4	148-2	146-9	146-4	149-1	148-7	150-0	150-2	150-4	149-4	42

35.—Index Numbers of a Family Budget of Staple Foods, Fuel and Lighting and Rent, in Canada, by Provinces and Months, 1923.

(DOMINION AVERAGE FOR 1913=100.)

Provinces.	1923.												
	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
STAPLE FOODS.													
P. E. Island.....	128.5	130.8	132.6	131.1	132.1	129.9	128.1	127.3	127.4	130.7	130.2	130.6	130.0
Nova Scotia.....	145.6	148.8	151.6	152.0	149.4	147.3	145.2	148.3	147.2	149.4	151.2	149.4	148.8
New Brunswick...	142.8	146.0	150.1	148.6	146.8	142.6	140.2	145.2	147.7	147.6	149.9	151.2	146.6
Quebec.....	139.6	139.6	144.1	141.9	134.8	132.8	132.3	136.4	134.1	135.2	135.6	137.7	137.0
Ontario.....	142.4	142.6	146.0	144.3	139.0	136.7	137.4	144.9	143.4	145.7	144.6	145.3	142.7
Manitoba.....	138.5	135.3	140.0	137.1	133.2	132.5	129.9	138.7	134.7	138.2	139.3	138.9	136.4
Saskatchewan.....	142.7	142.7	144.6	140.7	139.6	139.7	138.2	140.1	137.8	140.2	142.8	144.1	141.1
Alberta.....	139.8	138.2	141.9	137.1	135.2	134.8	134.5	136.0	135.6	140.7	141.6	143.1	138.2
British Columbia	155.2	152.2	156.7	153.6	153.7	154.2	152.2	154.0	155.0	156.9	161.5	160.3	155.5
FUEL AND LIGHTING.													
P. E. Island.....	185.8	185.8	207.9	214.2	212.6	212.6	190.0	190.0	190.0	190.0	190.0	190.6	196.6
Nova Scotia.....	168.0	167.5	165.4	163.8	162.7	160.6	161.2	160.1	165.9	163.8	163.8	162.7	163.8
New Brunswick...	173.2	178.5	178.5	174.8	176.3	174.8	174.8	174.8	175.3	171.1	170.6	174.8	174.8
Quebec.....	190.6	193.7	192.7	191.1	179.0	178.0	178.5	179.0	180.1	181.1	180.6	181.6	183.8
Ontario.....	198.4	200.0	197.9	197.4	194.8	190.6	190.6	191.6	190.0	191.6	193.7	192.7	194.1
Manitoba.....	201.6	202.1	202.6	206.8	206.8	206.8	198.4	200.5	205.8	204.7	204.7	206.3	203.9
Saskatchewan.....	195.8	203.1	202.6	200.0	202.6	203.7	203.7	202.6	206.3	199.5	200.0	200.0	201.7
Alberta.....	136.0	143.3	133.3	137.0	136.0	133.3	134.9	135.4	134.4	134.4	135.4	123.9	134.8
British Columbia	157.0	155.9	157.0	157.5	155.9	155.9	154.9	155.4	155.9	155.9	155.9	155.9	156.1
RENT.													
P. E. Island.....	121.7	121.7	121.7	121.7	121.7	121.7	121.7	121.7	121.7	121.7	121.7	121.7	121.7
Nova Scotia.....	122.8	122.8	122.8	117.6	117.6	115.5	115.5	115.5	115.5	115.5	115.5	115.5	117.7
New Brunswick...	136.4	136.4	136.4	136.4	139.8	139.8	139.8	139.8	139.8	139.8	139.8	139.8	138.7
Quebec.....	115.5	115.5	115.5	115.3	119.3	119.3	119.3	119.3	119.3	119.3	119.3	119.3	118.0
Ontario.....	152.2	152.2	152.2	152.2	152.2	151.6	151.6	151.6	151.1	151.1	151.1	151.1	151.7
Manitoba.....	181.2	181.2	181.2	181.2	181.2	181.2	181.2	181.2	181.2	181.2	181.2	181.2	181.2
Saskatchewan.....	184.5	184.5	184.5	184.5	184.5	184.5	184.5	184.5	184.5	184.5	184.5	184.5	184.5
Alberta.....	161.7	161.7	161.7	158.6	158.6	158.6	158.6	158.6	158.6	158.6	148.9	148.9	157.7
British Columbia	132.1	132.1	132.1	132.1	132.1	132.1	132.1	132.1	132.1	132.1	132.1	132.1	132.1
GRAND TOTAL.													
P. E. Island.....	133.7	135.2	139.1	139.3	139.5	138.3	134.4	133.9	134.0	135.7	135.4	135.4	136.2
Nova Scotia.....	140.5	142.4	143.6	141.8	140.3	138.3	137.2	138.7	138.9	139.7	140.7	139.3	140.1
New Brunswick...	144.8	147.1	149.2	148.0	148.4	146.0	144.8	147.3	148.8	148.1	149.2	150.1	147.7
Quebec.....	137.9	138.3	140.6	139.5	135.5	134.3	134.1	136.3	135.3	136.0	136.1	137.0	136.7
Ontario.....	153.4	153.6	155.1	154.2	151.1	148.8	149.1	153.1	152.0	153.4	153.1	153.4	152.5
Manitoba.....	161.7	160.1	162.5	161.3	159.2	158.9	156.8	161.7	160.2	161.9	162.4	162.2	160.7
Saskatchewan.....	163.9	165.2	165.8	163.7	163.5	163.4	162.6	163.4	163.1	163.1	164.5	165.1	163.9
Alberta.....	146.5	146.6	147.2	144.1	143.0	142.4	142.5	143.4	143.0	145.6	142.9	142.2	144.1
British Columbia	147.2	145.6	148.0	146.4	146.3	146.5	145.3	146.3	146.9	147.9	150.3	149.7	147.2

IX.—FINANCE.

The Finance section of the present edition of the Year Book is divided into four main parts. The first of these, Public Finance, includes an account of Dominion, provincial and municipal finance, with the latest available statistics. The second part deals with Currency and Banking and Loan and Trust Companies. This is followed by a historical and statistical treatment of Insurance, including Government Annuities, while the section concludes with a treatment of Commercial Failures.

I.—PUBLIC FINANCE.

The following treatment of public finance includes a discussion of Dominion, provincial and municipal finance in Canada, with numerous tables, and closes with a brief discussion of the national wealth and national income of the Dominion as the basis of all public finance.

In recent years the subject of public finance has been more elaborately treated than formerly, in response to an increasing public demand, resulting from the growing pressure of taxation to meet the augmented expenditures of the national, provincial and local administrations. In the consideration of these growing expenditures two facts must be kept in mind: (1) that our country is showing a relatively rapid growth of population—22 p.c. in the 10 years from 1911 to 1921, and (2) that \$1.50 in 1924 had approximately the same purchasing power as \$1 in 1913. Further, the effect of this latter fact in swelling the aggregated total income of the citizens of Canada so as to increase their tax-paying power should not be forgotten.

The great increase in Dominion expenditure since 1913 has, of course, been mainly due to the war and the burden of interest, pension charges, soldiers' civil re-establishment, etc., resulting from the war, as well as to the necessity of making good the deficits arising from the operation of the Canadian National Railways and the Canadian Government Merchant Marine. Similar increases have also taken place during the same period in provincial and municipal expenditure. In 1923 the total ordinary expenditure of provincial Governments was over \$131,000,000, as compared with \$53,826,219 in 1916, only six years before. (The aggregate interest payments of provincial Governments increased from \$7,817,844 in 1916 to \$26,496,795 in 1922.) Again, between 1913 and 1921, the aggregate taxes imposed by the municipalities of Ontario increased from \$34,231,214 to \$88,613,627—an increase of 158.9 p.c. Similarly, in Quebec the aggregate ordinary expenditures of the municipalities increased from \$19,139,465 in 1914 to \$45,888,009 in 1921, an increase of 139.7 p.c. In Manitoba the increase in municipal taxation has been from \$9,922,537 in 1912 to \$19,159,821 in 1923, an increase of 93.1 p.c. These statistics, covering nearly two-thirds of the population of the Dominion, are from provincial Government reports, and the growth which they show has doubtless also occurred in most of the other provinces.

1.—Dominion Public Finance.

Historical Sketch.—Both under the French *régime* and in the earlier part of the British, the territorial or casual revenues of Canada, consisting of certain seignorial dues and the proceeds of the sale of government timber and land, were reserved to the Crown, while the right of levying taxes and of regulating the trade and commerce of the colony was, after 1763, deemed to be vested in the British Parliament.

By the Quebec Act of 1774, certain duties on spirits and molasses were imposed, to be expended by the Crown in order to provide a revenue "towards defraying the expenses of the administration of justice and the support of the civil government of the province." A little later, in 1778, the British Government, by the Declaratory Act (18 Geo. III, c. 12), renounced forever the right of taxing the colonies to provide Imperial revenue, but maintained its claim to impose duties considered necessary for the regulation of trade, the proceeds to go towards defraying the expenditures of the colonial administration. After the Constitutional Act of 1791, the customs duties remained under the control of the Imperial Government, their revenue, as well as the territorial revenue above mentioned, coming in to the executive administration independently of the Legislative Assembly and thus making the executive power largely independent of the legislature. In case these revenues proved insufficient, recourse could generally be had to the grant made by the Imperial Government for the support of the army. As time went on, however, the Crown revenues became more and more inadequate to meet the increasing expenditure, while the wave of economy in Great Britain after 1815 made it impossible any longer to supplement these revenues from military sources. On the other hand, the purely provincial revenues collected under the authorization of the provincial legislature showed an increasing surplus. The power of the purse thus began to pass into the hands of the legislatures; in 1831 the British Parliament passed an Act placing the customs duties at the disposal of the legislatures.

Under the Act of Union a consolidated revenue fund was established. All appropriation bills were required to originate in the Legislative Assembly, which was forbidden to pass any vote, resolution or bill involving the expenditure of public money unless the same had been first recommended by a written message of the Governor-General. The British Government surrendered all control of the hereditary or casual revenues, which were thenceforth paid into the treasury of the province to be disposed of as its legislature should direct.

At the interprovincial conferences which took place prior to Confederation it was decided that the new Dominion Government, which was to take over permanently, as its chief source of revenue, the customs and excise duties that had yielded the greater part of the revenues of the separate provinces (direct taxation being as unpopular in British North America as in other new countries), was also to assume the provincial debts and to provide out of Dominion revenues definite cash subsidies for the support of the Provincial Governments. (See Tables 16 and 17.) Until the Great War, which made other taxes necessary, the customs and excise revenue constituted the chief resource of the Dominion Government for general purposes—the post office revenue and railway receipts which, properly speaking, are not taxes at all, being mainly or entirely absorbed by the expense of administering these services. Indeed, for many years preceding the war, customs and excise duties, together with the revenue from the head tax on Chinese immigrants, were the only items of receipts which were classified as taxes by the Department of Finance. In the last fiscal year of peace, these two items aggregated \$126,143,275 out of total receipts on consolidated fund account amounting to \$163,174,395, the post office and government railways furnishing between them \$26,348,847 of the remainder, offset, however, by expenditure on these two services amounting to \$27,757,196. Miscellaneous revenue, largely fees, amounted in that year to \$10,682,273—a comparatively small fraction of the total. As both customs and excise taxes were indirect, the average Canadian felt but little the pressure of taxation for Dominion purposes.

The war enormously increased the expenditure, and this increase had in the main to be met by loans. It is, however, a cardinal maxim of public finance that, where loans are contracted, sufficient new taxation should be imposed to meet the interest charge upon the loans and to provide a sinking fund for their ultimate extinction. This war taxation was begun in Canada within the first weeks of the war, when in the short war session of August, 1914, increases were made in the customs and excise duties on various commodities, including coffee, sugar, spirituous liquors and tobacco. In 1915 special additional duties of 5 p.c. *ad valorem* were imposed on commodities imported under the British Preferential Tariff and 7½ p.c. *ad valorem* on commodities imported under the Intermediate and General Tariff, certain commodities being exempted. New internal taxes were also imposed on bank circulation, on the income of trust and loan companies, on insurance in other than life and marine companies, on telegrams and cablegrams, railway tickets, sleeping-car berths, etc., also on cheques, postal notes, money orders, letters and post cards. In the following year, the business profits war tax (dropped in 1921) was introduced, and in 1917 an income tax was imposed. In 1918 both of these taxes were increased and their application widened, and in 1919 the income tax was again increased, and still further augmented in 1920, by a surtax of 5 p.c. of the tax on incomes of \$5,000 and over; the sales tax was also introduced in that year. This sales tax was increased in 1921 and again in 1922, while another adjustment became effective on Jan. 1, 1924. The cumulative result of these war taxes was that, in the fiscal year ended Mar. 31, 1921, customs duties were for the first time displaced from their position as the chief factor in Canadian revenue, the war taxes yielding \$168,385,327, as against the customs yield of \$163,266,804. In 1922 war taxes yielded \$177,484,161, while the yield of the customs fell to \$105,686,645. Again, in 1923 the war taxes yielded \$181,634,875 and customs duties \$118,056,469, and in 1924 war taxes yielded \$182,036,261 and customs duties \$121,500,798.

A more detailed sketch of the new taxation imposed during and following the war is appended for reference.

War Taxation in Canada.—War taxation began in Canada almost simultaneously with the outbreak of the war. In the short war session of August, 1914, the Customs Tariff Amendment Act (c. 5) and an Act to amend the Inland Revenue Act (c. 6) provided for increases in the customs and excise duties on various commodities, including coffee, sugar, spirituous liquors and tobacco. In the 1915 session the Customs Tariff War Revenue Act, 1915, imposed duties or additional duties of 5 p.c. *ad valorem* under the British Preferential Tariff, and of 7½ p.c. *ad valorem* under the Intermediate and General Tariffs on all goods in Schedule A of the Customs Tariff, whether dutiable or free of duty, subject to exemptions of which the chief were: fish caught by Canadian and Newfoundland fishermen, goods used in the manufacture of agricultural machinery and of binder twine, certain goods used for medical and surgical purposes, anthracite coal, steel for the manufacture of rifles, silk, chemical fertilizers, cotton seed cake and cotton seed cake meal. By the Special War Revenue Act (c. 8), new taxes were imposed as follows: on every bank, ¼ of 1 p.c. on the average amount of its notes in circulation during each three-month period; on every trust and loan company, 1 p.c. on its Canadian income; on every insurance company other than life and marine insurance companies, 1 p.c. of its net premiums received in Canada. Further, taxes were imposed of 1 cent on every cablegram or telegram for which a charge of 15 cents or more was made; 5 cents on the first \$5 and 5 cents on every additional \$5 on railway and steamboat tickets to places in North America and the British West Indies, and on tickets to places outside of these \$1 if the price exceeded \$10, \$3 if it exceeded \$40, and \$5 if it exceeded \$65; 10 cents on every sleeping-car berth and 5 cents on every parlour-car seat; all the foregoing taxes to be collected by the companies concerned and transmitted to the Government. The same Act imposed the following stamp duties: 2 cents on every bank cheque and on every

express and post office money order and 1 cent on every postal note; 2 cents on every bill of lading; 1 cent extra on every letter and post card; 1 cent for every 25 cents of the retail price of proprietary medicines and perfumery; 3 cents for a pint or less and 5 cents for every quart of non-sparkling wine; and 13 cents for $\frac{1}{2}$ pint or less and 25 cents for every pint of sparkling wine.

By 1916 it was seen that still further taxation was required to maintain the finances of the Dominion in a satisfactory condition. As a result, the Business Profits War Tax Act of that year (c. 11) was passed, imposing a tax of 25 p.c. of the amount by which the profits earned in a business owned by an incorporated company exceeded 7 p.c. per annum, or, in a business owned by any other person or association, exceeded 10 p.c. per annum upon the capital employed in the business. Businesses employing less than \$50,000 capital, life insurance companies, businesses engaged in farming and live stock raising, and businesses of which 90 p.c. or more of the capital was owned by a province or a municipality, were exempted, these exemptions not to apply to businesses engaged to the extent of 20 p.c. or over in manufacturing or dealing in munitions or war materials or supplies.

In the 1917 session the Business Profits War Tax Act was amended (c. 6) to provide for a tax of 50 p.c. on profits in excess of 15 p.c. per annum, but not exceeding 20 p.c. per annum, and a tax of 75 p.c. on profits in excess of 20 p.c. per annum. In the same session the Income War Tax Act (c. 28) imposed a tax of 4 p.c. on incomes exceeding \$2,000 in the case of unmarried men and widows and widowers without children, and on incomes exceeding \$3,000 in the case of other persons. A super-tax was also imposed, progressing from 2 p.c. on the amount by which an income exceeded \$6,000 but did not exceed \$10,000, up to 25 p.c. on the amount by which an income exceeded \$100,000.

In the session of 1918 the Business Profits War Tax Act was amended by chapter 10, extending the operation of the Act to businesses having a capitalization of from \$25,000 to \$50,000. The Income War Tax Act, as amended by chapter 25, lowered the limit of exemption to \$1,000 for unmarried persons and childless widows and widowers and to \$2,000 for other persons, the former paying 2 p.c. on incomes between \$1,000 and \$1,500, the latter 2 p.c. on incomes between \$2,000 and \$3,000; an additional \$200 exemption was granted for each child under 16 dependent on the taxpayer for support. The normal tax remained at 4 p.c., but the super-tax was increased on incomes exceeding \$200,000, being graduated up to 50 p.c. on incomes exceeding \$1,000,000. A surtax was also introduced, ranging from an additional 5 p.c. of the combined normal tax and super-tax on incomes between \$6,000 and \$10,000, to an additional 25 p.c. of the normal and super-tax on incomes exceeding \$200,000, corporations to pay a tax of 6 p.c. on incomes exceeding \$3,000, but no super-tax or surtax. By the Customs Tariff Amendment Act (c. 17), increased duties were imposed on tea, coffee, and tobacco, and by the Act to amend the Special War Revenue Act, 1915 (c. 46), increased or new taxes were imposed as follows: for each seat or berth in a parlour or sleeping car, 10 cents and 10 p.c. of the price of the seat or berth; 1 cent on every hundred matches and 8 cents on every package of 54 or fewer playing cards, with customs duties of the same amount on these articles when imported; 10 p.c. of the selling price on passenger automobiles, gramophones, etc., and records therefor, mechanical piano players and records therefor, and jewelry.

In the 1919 session, the Business Profits War Tax was renewed (chap. 39) for the calendar year 1919: in the case of businesses having a capital between \$25,000 and \$50,000, profits in excess of 10 p.c. were now to be taxed 25 p.c.: businesses having a capital of \$50,000 or more to be taxed at the same rate as in previous years. The Income War Tax Act was amended by chapter 55, which increased the general rate of taxation. All corporations paid 10 p.c. of their net income in excess of \$2,000, as against 6 p.c. under the former Act. In respect of individuals, the normal rate of 4 p.c. was to be levied on all incomes exceeding \$1,000, but not exceeding \$6,000, in the case of unmarried persons and widows or widowers without dependent children, and upon all incomes exceeding \$2,000 but not exceeding \$6,000 in the case of all other persons, the respective minima of \$1,000 and \$2,000 being exempt from taxation; an additional exemption of \$200 was allowed for each child under 18 years dependent upon the taxpayer for support. A normal tax of 8 p.c. was levied on the excess of all incomes over \$6,000. The surtax was imposed on a progressive scale on all incomes of over \$5,000, applying first at the rate of 1 p.c. on the amount by which the income exceeded \$5,000 and did not

exceed \$6,000; then at the rate of 2 p.c. on the amount by which the income exceeded \$6,000 and did not exceed \$8,000; then at a rate increasing by 1 p.c. for each \$2,000 increase of income up to \$100,000, so that 48 p.c. was levied on the amount by which the income exceeded \$98,000 and did not exceed \$100,000; then at 52 p.c. on the amount by which the income exceeded \$100,000 and did not exceed \$150,000; 56 p.c. on the excess between \$150,000 and \$200,000; 60 p.c. on the excess between \$200,000 and \$300,000; 63 p.c. on the excess between \$300,000 and \$500,000; 64 p.c. on the excess between \$500,000 and \$1,000,000; 65 p.c. on the excess income over \$1,000,000. Chapter 47 provided for the entire repeal of the extra duty of 5 p.c. *ad valorem* added to the British Preferential Tariff under the Customs Tariff War Revenue Act, 1915, and for the partial repeal in respect of the intermediate and general tariff rates of the excess of $7\frac{1}{2}$ p.c. imposed under the same Act; also for the free importation into Canada of wheat, wheat flour and potatoes from countries not imposing a customs duty on such articles when grown or produced in Canada. Five cents per lb. was deducted from the duty on roasted or ground coffee under the preferential, intermediate and general tariff schedules and 3 cents per lb. was deducted from the duty on British-grown teas under the preferential tariff. Under the general tariff, the Act provided for a total reduction (including the $7\frac{1}{2}$ p.c. war duty) from $27\frac{1}{2}$ p.c. to 15 p.c. on cultivators, barrows, horse-rakes, seed-drills, manure spreaders and weeders and complete parts thereof; from $27\frac{1}{2}$ p.c. to $17\frac{1}{2}$ p.c. on ploughs and complete parts thereof, windmills and complete parts thereof, portable engines and traction engines for farm purposes, horse-powers and threshing-machine separators and appliances therefor. On hay-loaders, potato-diggers, fodder or feed cutters, grain crushers, fanning mills, hay-tedders, farm, road or field rollers, post-hole diggers, and other agricultural implements, provision was made for a reduction of duty to 20 p.c., with a similar reduction on farm wagons. Respecting cement, the war customs duty was repealed and the general tariff rate reduced to 8 cents per 100 lbs. Specific instead of *ad valorem* rates of duty were enacted for pig lead, zinc spelter and copper ingots.

In the session of 1920, chapter 36 amended the Business Profits War Tax Act by exempting from tax profits which, during the year 1920, did not exceed 10 p.c. of the capital employed; upon profits exceeding 10 p.c. up to 14 p.c. there was a tax of 20 p.c. of the profits; from 15 to 20 p.c., a tax of 30 p.c.; from 20 to 30, a tax of 50 p.c.; exceeding 30, a tax of 60 p.c. In any business with a capital of \$25,000 to \$50,000, 20 p.c. tax was charged on the amount by which profits exceeded 10 p.c. of capital; this was also to apply in respect of the profits earned in 1917, 1918 and 1919 on businesses having capital less than \$50,000, if 20 p.c. or more of such profits had been derived from business carried on for war purposes. Chapter 49 amended the Income War Tax Act of 1917 in the following particulars: (1) empowering the Minister to determine deficits and losses; (2) taxing dividends or shareholders' bonuses; (3) taxing income from an estate or accumulating in trust; (4) increasing by 5 p.c. tax and surtax on incomes of \$5,000 or more; (5) requiring that one-quarter tax be forwarded with return, the balance being payable, if desired, in 3 bi-monthly instalments with interest at 6 p.c.; (6) imposing severe penalties for default. Chapter 71 amended the Special War Revenue Act of 1915 by imposing a stamp tax on bills and notes, bank statements, overdrafts, bank cheques, sale or transfer of stock, etc.; also by imposing new excise taxes on certain classes of goods, ranging from 3 p.c. to 50 p.c. according to use or value of the goods, and specific duties on certain fluids. In addition, a tax of 1 p.c. was imposed upon wholesale and manufacturers' sales.

In the session of 1921, the excise duties on spirits were increased from a basic rate of \$2.40 per proof gallon to a basic rate of \$9.00 per proof gallon, the old rates being continued, however, where the spirits were used by licensed manufacturers of patent and proprietary medicines, extracts, essences and pharmaceutical preparations. Under chapter 50 the tax on sales and deliveries by manufacturers and wholesalers and jobbers was raised from 1 p.c. to $1\frac{1}{2}$ p.c. and in the case of sales by manufacturers directly to retailers and customers, from 2 p.c. to 3 p.c. Where goods were imported, the rates under similar circumstances were raised from 2 p.c. to $2\frac{1}{2}$ and 4 p.c. respectively.

Recent Modifications in the System of Taxation.—In the session of 1922, the Special War Tax Revenue Act, 1915, was amended by c. 47. Taxes on cheques,

bills of exchange, promissory notes and express money orders were increased to a rate of 2c. on every \$50 or fraction thereof, with a maximum of \$2 on \$5,000 or more. A receipt for \$10 or over must bear a 2c. stamp. The normal rate of sales tax was also increased from 4 p.c. to 6 p.c. The Income War Tax Act, 1917, was amended by c. 25. The normal rate was to be 4 p.c. on incomes of from \$2,000 to \$6,000 in the case of a married person or one having dependent upon him any of the following—a parent or grandparent, daughter or sister, or a son or brother under 21 years of age and physically or mentally incapable of self-support; the additional exemption for each child under 18 years of age dependent upon the taxpayer for support was increased from \$200 to \$300. For all other persons the normal tax was 4 p.c. on incomes of from \$1,000 to \$6,000. By c. 19 various reductions were made in the customs tariff, notably on sugar, agricultural implements, textiles, and boots and shoes. Further, by c. 27 the excise duties on cigars were diminished and those on cigarettes increased.

In 1923, c. 42 authorized a discount of 10 p.c. of the customs duties on articles other than alcoholic liquors, tobacco and sugar imported under the British Preferential Tariff, where such articles are directly imported through Canadian ports, and where the regular rate of duty exceeds 15 p.c.; negotiations for a commercial agreement with the United States were also authorized, while the rates of duty on sugar and certain other articles were reduced. By c. 53 the Income War Tax Act of 1917 was amended to provide that a taxpayer's income should be deemed to be not less than his income from his chief occupation, that a reasonable rate of interest on borrowed capital might be deducted from his income, that the incomes of consuls, consuls-general, and officials of other countries whose duties require them to reside in Canada should be exempted from taxation if such countries grant reciprocal privileges to resident Canadian officials; other amendments deal with notices of appeals and the recovery of moneys due in taxation. By c. 53 the excise duty on cigarettes was reduced. The Special War Revenue Act of 1915 was amended so as to make the maximum stamp tax on cheques \$1 instead of \$2; the rate of the sales tax was adjusted to a uniform 6 p.c., while manuscript, raw furs, wool not further prepared than washed, and drain tiles for agricultural purposes were added to the list of exempted articles.

In 1924 it was provided by c. 10 that the operation of the Business Profits War Tax should not extend beyond Dec. 31, 1920. By c. 37 the administration of the Business Profits War Tax Act of 1916 and the Income War Tax Act of 1917 was transferred from the Department of Finance to the Department of Customs and Excise. The Customs Tariff of 1907 was amended by c. 38 in the general direction of reducing the rates of customs duty levied upon instruments of production used in agriculture, mining, forestry and fisheries and on materials used in the manufacture of such instruments of production; provision was also made for the extension of the British Preferential Tariff to territory administered under mandate of the League of Nations by any British country, or for the withdrawal of the preference in such circumstances; in computing the *ad valorem* rate of duty on tea purchased in bond in the United Kingdom, the value for duty is not to include the United Kingdom customs duty payable on tea consumed in that country. By c. 46, the Income War Tax Act of 1917 was amended by increasing the additional exemption allowed for each child from \$300 to \$500; another amendment aims at the prevention of evasion of the tax by inter-company purchases or sales at more or less than fair prices where the companies concerned are associated in business; provisions are also made with regard to incomes of non-residents carrying on business in

Canada, to incomes of partnerships and liens for income tax. By c. 68, the Special War Revenue Act of 1915 is amended so as to reduce the general rate of the sales tax from 6 p.c. to 5 p.c.; in addition, a considerable number of articles, including text-books and instruments of production in the primary industries of the country, are entirely exempted from the tax, while boots and shoes, including rubber footwear, biscuits of all kinds, creosoted railway ties and various other articles are to pay only half the ordinary rate, or 2½ p.c.

1.—The Current Balance Sheet of the Dominion.

A summary review of the current financial situation of the Dominion as on Mar. 31, 1924, is given in the balance sheet shown on this page (Table 1). This shows the gross debt on the above date to have been \$2,819,610,470, partly offset by available assets aggregating \$401,827,195, leaving a net debt of \$2,417,783,275.¹ Non-available assets, including such public works as canals and railways, also loans to railways, amounted in the aggregate to \$1,470,860,222, leaving a debit balance on Consolidated Fund Account on Mar. 31, 1924, of \$946,923,053. The details of the various assets and liabilities are contained in the schedules accompanying the balance sheet and printed in the Public Accounts.

1.—Balance Sheet of the Dominion of Canada, as at March 31, 1924.

ACTIVE ASSETS—		(From the Public Accounts).
Cash on hand and in Banks.....	\$	43,612,756
Specie Reserve.....		103,427,038
Advances to Provinces, Banks, etc.....		92,418,747
Advances to Imperial and Foreign Governments.....		40,071,243
Soldier Land Settlement Loans.....		86,728,789
Miscellaneous Current Accounts.....		35,568,622
Total Active Assets.....		401,827,195
Balance, being Net Debt, March 31, 1924 (exclusive of interest accrued and outstanding), carried forward.....		2,417,783,275
	\$	2,819,610,470
NON-ACTIVE ASSETS—		
Public Works, Canals.....	\$	151,195,067
Public Works, Railways.....		423,623,833
Public Works, Miscellaneous.....		183,413,782
Military Property and Stores.....		12,033,498
Territorial Accounts.....		9,895,948
Railway Accounts (old).....		88,397,418
Railway Accounts (Loans non-active).....		582,082,390
Canadian Government Merchant Marine, Limited.....		7,479,856
Miscellaneous Investments (non-active).....		12,738,430
Balance Consolidated Fund as at March 31, 1923....	\$1,020,343,861	
Excess of Revenue over Expenditure, year ended March 31, 1924.....	73,420,808	
		946,923,053
	\$	2,417,783,275
LIABILITIES—		
Dominion Notes in Circulation.....	\$	216,625,004
Bank Note Circulation Redemption Fund.....		6,225,878
Post Office Account, Money Orders, Postal Notes, etc., outstanding.....		2,351,084
Savings Bank Deposits.....		34,211,540
Insurance and Superannuation Funds.....		25,458,410
Trust Funds.....		19,327,244
Contingent Funds.....		2,410,600
Province Accounts.....		9,624,153
Miscellaneous Current Accounts.....		510,809
Temporary Loans.....		91,520,000
Funded Debt.....		2,407,806,902
Interest Due and Unpaid.....		3,538,846
	\$	2,819,610,470

NOTE.—The Dominion of Canada is also responsible for principal and interest on loans negotiated by railways under various Acts of Parliament amounting to \$367,786,714. Of this amount, \$58,157,952 was held by the Minister of Finance in 1924.

¹ The net debt on March 31, 1922, was \$2,422,135,801 and on March 31, 1923, \$2,453,776,869. See Table 18, page 752.

2.—Receipts and Disbursements.

The total receipts of the Dominion Government on Consolidated Fund Account for the fiscal year ended Mar. 31, 1924, were \$396,837,682, an increase of \$2,222,782 over the preceding year; besides this, special receipts amounted to \$9,745,158—a total of \$406,582,840 (Table 2). The regular expenditure on consolidated fund account was \$324,813,190, but net special expenditure amounting to \$8,348,842 was also charged to this account. There was also a net expenditure on capital account of \$10,861,277, while advances to railways were made, aggregating \$23,710,617, as well as advances to the Canadian Government Merchant Marine, aggregating \$1,500,000. Thus the total disbursements, inclusive of these advances, amounted to \$370,589,247. There was a decrease of \$35,993,594 in the net debt (gross debt less available assets) during the year. (See Table 22.)

Detailed statistics of receipts and disbursements are contained in Tables 2 and 3. Tables 4 and 5 are historical tables giving the figures of the main items of Dominion receipts and expenditure since Confederation, while Table 6 shows the per capita receipts and expenditure for these years according to census and estimated populations.

2.—Details of Receipts, fiscal years ended March 31, 1920-1924.

Items.	1920.	1921.	1922.	1923.	1924.
	\$	\$	\$	\$	\$
Consolidated Fund Receipts—					
Taxation—					
Chinese Revenue.....	132,133	240,107	394,932	201,458	325,762
Customs.....	168,796,823	163,266,804	105,686,645	118,056,469	121,500,798
Excise.....	42,698,083	37,118,367	36,755,207	35,761,997	38,181,747
War tax revenue—					
Banks.....	1,170,223	1,257,534	1,293,697	1,244,437	1,236,958
Trust and Loan Companies.....	274,216	293,802	283,994	312,392	308,632
Insurance Companies.....	658,731	807,667	749,959	852,328	857,587
Business Profits.....	44,145,184	40,841,401	22,815,667	13,031,462	4,752,681
Income Tax.....	20,263,740	46,381,824	78,684,355	59,711,538	54,204,028
Sales Tax, Tax on Cheques, Transportation Tax, etc.....	15,587,707	78,803,099	73,656,489	106,482,718	120,676,376
Total from Taxation.....	293,706,810	369,010,605	320,320,945	335,651,799	342,044,569
Non-Tax Revenue—					
Canada Gazette.....	50,325	61,468	77,830	82,847	72,168
Canals.....	441,926	365,941	804,516	742,404	897,412
Casual.....	3,731,725	4,005,183	4,212,862	3,393,429	3,502,707
Dominion Lands.....	4,622,592	3,955,326	2,799,450	2,347,715	2,281,704
Electric Light Inspection.....	115,859	140,474	139,831	154,770	148,590
Fines and Forfeitures.....	628,793	501,448	265,153	152,085	321,127
Fisheries.....	336,591	297,797	224,157	290,623	163,492
Gas Inspection.....	61,694	70,987	81,720	69,578	71,637
Inspection of Staples.....	1,092,606	1,483,278	1,937,323	2,364,037	2,319,971
Insurance Inspection.....	62,384	89,505	95,735	112,833	109,677
Interest on Investments.....	17,080,981	24,815,246	21,961,513	16,465,303	11,916,479
Law Stamps.....	7,490	9,423	5,199	13,893	7,177
Mariners' Fund.....	78,227	87,601	131,727	161,010	172,319
Military College.....	53,599	70,107	67,315	61,999	66,105
Militia Pension Revenue.....	47,979	139,385	132,188	121,244	124,654
Ordnance Lands.....	9,835	8,878	8,438	5,922	57,502
Patent Fees.....	354,497	407,887	454,886	484,479	459,780
Penitentiaries.....	130,843	162,710	143,070	134,515	132,907
Post Office.....	24,471,709	26,706,198	26,402,299	29,016,771	28,865,374
Premium, Discount and Exchange.....	1,974,072	1,116,581	781,224	1,899,234	2,159,517
Public Works.....	479,088	503,053	490,056	486,454	502,755
Royal N.W.M. Police Officers' Pen.....	5,586	6,469	6,175	5,926	5,695
Steamboat Inspection.....	4,594	72,704	117,548	126,004	127,897
Superannuation Fund.....	21,986	22,086	18,511	4,572	8,722
Weights and Measures.....	147,045	264,587	269,806	278,086	290,175
Other Revenues.....	21,469	11,610	—	—	7,568
Total Consolidated Fund Receipts.....	349,746,335	434,386,537	381,952,387	394,614,900	396,837,682
Special Receipts—					
Miscellaneous Revenue.....	—	1,905,648	319,184	8,479,310 ¹	9,745,158 ²
Total Receipts.....	349,746,335	436,292,185	382,271,571	403,094,210	406,582,840

¹ Of this amount \$8,199,333 was received from the British Government to cover exchange on re-payments made to the Dominion Government in London, July, 1920 to August, 1921.

² Includes \$8,305,760, difference between par and the rate allowed on 4½% Bonds (1925-45) amounting to \$65,207,351, and 3½% Bonds (1925-28) amounting to \$2,000,000, which were redeemed as at March 28, 1924.

3.—Details of Disbursements, fiscal years ended March 31, 1920-1924.

Items.	1920.	1921.	1922.	1923.	1924.
	\$	\$	\$	\$	\$
Consolidated Fund Expenditure—					
Air Board.....	—	1,351,212	1,624,843	1,004,983	1,249,178
Administration of Justice.....	1,641,122	2,009,240	2,151,956	2,173,404	2,196,492
Arts and Agriculture.....	4,783,083	5,489,384	5,805,900	6,271,816	6,805,058
Bounties.....	352,558	149,202	100,140	95,750	79,810
Charges on debt—					
Charges of Management.....	875,645	992,374	806,926	880,672	992,611
Interest on debt.....	107,527,089	139,551,520	135,247,849	137,892,735	136,237,872
Premium, discount and exchange.....	587,013	109,713	3,302,674	122,396	1,296
Total charges on debt.....	108,989,747	140,653,607	139,357,449	138,895,803	137,231,779
Civil Government.....	7,782,330	8,784,178	9,968,932	10,114,860	10,514,983
Collection of revenue ² —					
Adulteration of food.....	44,987	59,860	79,999	111,565	90,800
Customs and Excise.....	5,955,374	6,615,202	6,657,572	6,535,822	6,775,633
Dominion Lands.....	4,751,780	3,956,027	4,226,070	4,278,836	3,694,768
Post Office.....	20,774,312	22,696,561	28,121,425	27,794,502	28,305,941
Public Works.....	921,619	1,113,876	1,073,304	1,068,336	1,061,840
Railways and Canals.....	8,418,624	8,886,458	8,624,094	7,691,261	2,126,803
Weights and Measures, etc.....	346,327	406,380	431,754	436,557	463,388
Other.....	6,658	5,676	2,862	2,686	2,145
Total collection of revenue...	41,219,681	43,740,040	49,217,080	47,919,565	42,519,318
Department of Mines.....	566,175	595,261	608,028	614,087	415,922
Dominion Police.....	151,588	1	1	1	1
Fisheries.....	1,215,082	1,385,102	1,343,136	1,215,793	1,430,065
Government of N.W. Territories.....	3,979	29,146	156,195	221,329	301,591
Health.....	—	238,774	255,450	244,104	251,429
Immigration.....	1,388,185	1,688,961	1,636,597	1,987,745	2,417,374
Indians.....	2,351,969	2,410,073	2,944,037	3,075,964	3,594,798
Labour.....	648,713	1,421,969	1,645,540	1,969,877	1,220,006
Legislation.....	2,617,581	2,343,201	3,870,450	2,600,958	2,318,643
Lighthouse and Coast Service.....	2,120,005	2,263,118	2,280,766	2,306,485	2,293,059
Mail Subsidies and Steamship Subventions.....	1,632,906	1,094,509	1,105,896	1,070,684	1,105,087
Marine Hospitals.....	90,112	77,546	91,177	114,727	109,429
Militia.....	4,616,782	9,893,863	11,017,533	9,883,986	9,761,956
Miscellaneous.....	15,090,383	19,938,768	13,577,625	10,561,668	10,583,850
Naval Service.....	1,168,438	3,284,911	3,183,753	2,286,857	1,360,807
Ocean and River Service.....	1,558,502	2,021,930	1,684,389	1,627,607	2,439,279
Penitentiaries.....	1,022,330	1,296,352	1,527,451	1,598,831	1,628,227
Pensions.....	26,004,461	37,420,751	36,153,031	32,985,998	33,411,081
Public Works, Income.....	9,016,246	10,846,875	10,574,364	9,978,440	11,900,847
Quarantine.....	222,506	262,498	261,355	225,002	210,168
Railways and Canals, Income.....	1,184,832	2,934,424	5,311,715	7,179,430	5,349,001
Royal C. M. Police.....	3,386,389	3,927,799	2,962,442	2,443,286	2,446,143
Scientific Institutions.....	464,450	587,892	624,380	664,326	1,116,744

¹ Now included with Royal C. M. Police. ² The items included under "Collection of revenue" are those given under this heading on pages 79 and 80 of the Public Accounts for 1919.

Note.—Adulteration of Food, Marine Hospitals and Quarantine, have been classified in the public accounts of 1921, 1922 and 1923 under the heading "Health," but are here deducted, so as not to break the continuity of the table.

3.—Details of Disbursements, fiscal years ended March 31, 1920-1924—concluded.

Items.	1920.	1921.	1922.	1923.	1924.
	\$	\$	\$	\$	\$
Consolidated Fund Expenditure—con.					
Soldiers' Civil Re-establishment.....	45,869,064	35,174,788	17,147,351	12,974,858	9,970,993
Soldiers' Land Settlement.....	2,886,156	3,454,210	2,125,874	1,726,413	1,532,978
Steamboat Inspection.....	82,634	97,704	103,670	110,458	111,500
Subsidies to Provinces.....	11,490,860	11,490,860	12,211,924	12,207,313	12,386,136
Superannuation.....	517,245	554,510	603,116	733,399	748,788
Superannuation No. 3.....	—	80,520	69,246	58,457	53,004
Superannuation No. 4.....	—	54,541	435,838	480,609	565,178
Trade and Commerce.....	1,502,712	1,880,943	3,679,146	2,471,831	2,817,707
Yukon Territory.....	205,124	189,483	142,916	197,930	284,608
Total Ordinary Expenditure.....	303,843,930	361,118,145	347,560,691	332,293,732	324,813,190
Special Disbursements—					
Railway Subsidies.....	334,845	—	—	—	—
War and Demobilization.....	346,612,955	16,997,544	1,544,250	4,464,760	446,083 ¹
Cost of Loan Flotations.....	17,945,120	140,020	82,636	3,065,095	7,705,544
Other charges.....	2,050,193	352,028	218,882	977,836	197,215
Total Special.....	366,943,113	17,489,592	1,845,768	8,507,691	8,348,842²
Other Disbursements—					
Capital Expenditure.....	69,301,878	40,012,807	16,295,332	9,807,124	10,861,277 ³
Advances to Railways (Non-active)....	45,780,690	109,662,655	97,950,645	77,863,938	23,710,617
Advances to Canadian Government Merchant Marine, Ltd.....	—	—	—	5,979,856	1,500,000
Advances to Quebec Harbour Com- missioners (Non-active).....	161,000	335,000	14,600	284,200	449,000
Miscellaneous debits and credits re sundry non-active assets accounts....	—	—315,686	—138,647	—1,264	906,321 ⁴
Grand Total Disbursements.....	786,030,611	528,302,513	463,528,389	434,735,277	370,589,247

¹Expenditure on adjustment of war claims, \$766,432, less receipts on war and demobilization account \$320,349.

²Or \$8,669,191 less \$320,349 received on war and demobilization account.

³Net figure. Total expenditure on capital account was \$11,762,985 less refunds of \$901,711.

⁴This includes \$621,987 balance of loan made to Victoria Shipowners, Ltd., in 1920-21, now transferred to non-active assets account.

4.—Principal Items of Dominion Expenditure, 1868-1924.

Fiscal years.	Consolidated Fund.							
	Interest on Debt.	Charges of management, premium, discount and exchange.	Pensions.	Public Works.	Railways and Canals. ²	Subsidies to Provinces.	Post Office.	Total Expenditure chargeable to Consolidated Fund.
	\$	\$	\$	\$	\$	\$	\$	\$
1868...	4,501,568	359,190	56,422	126,270	581,503	2,753,966	616,802	13,486,093
1869...	4,907,014	465,657	50,564	65,013	641,814	2,604,050	787,886	14,033,084
1870...	5,047,054	339,999	53,586	120,031	743,070	2,588,605	808,623	14,345,510
1871...	5,165,304	126,655	52,611	597,275	752,772	2,624,940	815,471	15,623,082
1872...	5,257,231	346,413	62,251	849,786	913,236	2,930,113	929,609	17,539,469
1873...	5,209,206	178,644	49,204	1,297,999	1,378,164	2,921,400	1,067,866	19,174,648
1874...	5,724,436	264,685	56,454	1,778,916	2,260,820	3,752,757	1,387,270	23,316,817
1875...	6,590,790	227,201	63,657	1,756,010	1,981,893	3,750,962	1,520,861	23,713,071
1876...	6,400,902	208,149	110,201	1,948,242	1,897,283	3,690,355	1,622,827	24,488,372
1877...	6,797,227	207,875	113,531	1,262,823	2,239,346	3,655,851	1,705,312	23,519,302
1878...	7,048,884	192,087	105,842	997,470	2,374,314	3,472,808	1,724,939	23,503,158
1879...	7,194,734	277,923	107,795	1,013,023	2,570,361	3,442,764	1,784,424	24,455,382
1880...	7,773,869	289,085	192,889	1,046,342	2,226,456	3,430,846	1,818,271	24,850,634
1881...	7,594,145	225,444	96,389	1,108,815	2,603,717	3,455,518	1,876,658	25,502,454
1882...	7,740,804	195,044	101,197	1,342,000	2,755,833	3,530,999	1,980,567	27,067,104
1883...	7,668,552	234,170	98,446	1,765,256	3,117,465	3,606,673	2,176,089	28,730,157
1884...	7,700,181	229,906	95,543	2,908,852	3,122,103	3,603,714	2,312,965	31,107,706
1885...	9,419,432	387,495	89,879	2,302,363	3,268,222	3,959,327	2,488,315	35,037,060
1886...	10,137,009	346,921	88,319	2,046,552	3,339,670	4,182,526	2,763,186	39,011,612
1887...	9,682,929	287,742	102,109	2,133,316	3,673,894	4,169,341	2,818,907	35,657,680
1888...	9,823,313	343,592	120,334	2,162,116	4,160,332	4,188,514	2,889,729	36,718,495
1889...	10,148,932	273,590	116,030	2,299,231	4,095,301	4,051,428	2,982,321	36,917,835
1890...	9,656,841	230,409	107,391	1,972,501	4,362,200	3,904,922	3,074,470	35,994,031
1891...	9,584,137	262,068	103,850	1,937,546	4,505,616	3,903,757	3,161,676	36,343,568
1892...	9,763,978	183,938	92,457	1,627,851	4,337,877	3,935,914	3,161,120	36,765,894
1893...	9,806,888	213,794	90,309	1,927,832	3,848,404	3,935,765	3,421,203	36,514,053
1894...	10,212,596	180,975	86,927	2,033,955	3,760,550	4,206,655	3,517,261	37,585,025
1895...	10,466,294	278,950	84,349	1,742,317	3,704,126	4,250,675	3,593,647	38,132,005
1896...	10,502,430	248,575	86,080	1,299,769	3,826,226	4,235,664	3,665,011	36,949,142
1897...	10,645,663	315,314	90,882	1,463,719	3,725,690	4,238,059	3,789,478	38,349,760
1898...	10,516,758	199,887	96,187	1,701,313	4,049,275	4,237,372	3,575,412	38,832,626
1899...	10,855,112	173,257	96,129	1,902,664	4,246,404	4,250,636	3,603,799	41,903,500
1900...	10,699,645	227,194	93,453	2,289,889	5,244,301	4,250,608	3,758,015	42,975,279
1901...	10,807,955	201,861	93,551	3,386,632	6,377,961	4,250,607	3,931,446	46,866,368
1902...	10,975,935	263,250	83,305	4,221,294	6,508,477	4,402,098	4,023,637	50,759,392
1903...	11,068,139	294,968	87,925	4,065,553	7,221,705	4,402,503	4,105,178	51,691,903
1904...	11,128,637	288,984	113,495	4,607,330	8,397,434	4,402,292	4,347,541	55,612,833
1905...	10,630,115	276,072	140,424	6,765,446	9,803,912	4,516,038	4,634,528	63,319,683
1906...	10,814,697	346,902	179,023	7,484,716	8,779,678	6,726,373	4,921,577	67,240,641
1907...	6,712,771	244,548	125,832	5,520,571	7,011,858	6,745,134	3,979,557	51,542,161
1908...	10,973,597	383,820	187,557	8,721,327	10,580,114	9,032,775	6,005,930	76,641,452
1909...	11,604,584	356,707	191,533	12,300,184	10,780,126	9,117,143	6,592,386	84,064,232
1910...	13,098,160	358,973	216,697	7,261,218	10,215,038	9,361,388	7,215,358	79,411,747
1911...	12,535,851	376,777	240,586	8,621,431	11,123,251	9,092,472	7,954,223	87,774,198
1912...	12,259,397	455,011	245,045	10,344,487	12,330,463	10,281,045	9,172,036	95,161,441
1913...	12,605,882	502,988	283,188	13,468,505	13,766,180	13,211,800	10,832,804	112,059,537
1914...	12,893,505	487,194	311,900	19,007,513	14,935,138	11,280,469	12,822,058	127,384,473
1915...	15,736,743	554,729	358,558	19,343,532	13,876,060	11,451,673	15,961,191	135,523,207
1916...	21,421,585	731,836	671,133	12,039,252	20,777,830	11,451,673	16,009,139	130,350,727
1917...	35,802,567	496,387	2,814,546	8,633,096	27,124,004	11,469,148	16,300,579	148,599,343
1918...	47,845,535	488,012	8,155,691	7,432,901	34,849,608	11,369,148	18,046,558	178,284,313
1919...	77,431,432	1,305,676	18,282,440	6,295,060	45,494,594	11,327,236	19,273,758	232,731,283
1920...	107,527,089	1,462,658	26,004,461	9,016,246	8,418,624	11,490,860	20,774,312	303,843,930
1921...	139,551,520	1,102,088	37,420,751	10,846,875	8,886,458	11,490,860	22,696,561	361,118,145
1922...	135,247,849	4,109,601	36,153,031	10,574,364	8,624,094	12,211,924	28,121,425	347,560,691
1923...	137,892,735	1,003,068	32,985,998	9,978,440	7,691,261	12,07,313	27,794,502	332,293,732
1924...	136,237,872	993,907	33,411,081	11,900,847	2,126,803	12,388,136	28,305,940	324,813,190

¹ Nine months. ² Expenditure (Collection of Revenue).

Note.—From 1868 to 1906, inclusive, the fiscal years ended on June 30, and from that date to 1924, on March 31.

4.—Principal Items of Dominion

Years.	Capital Expenditure.								
	Canals.	Canadian Pacific Railway.	Debts allowed to Provinces.	Dominion Lands.	Inter-colonial and connected Railways, miscellaneous.	Public Works.	Hudson Bay Railway.	National Transcontinental Railway, including Quebec Bridge.	Prince Edward Island Railway.
	\$	\$	\$	\$	\$	\$	\$	\$	\$
1868	51,498	—	—	—	455,250	41,690	—	—	—
1869	130,142	—	—	—	282,615	8,548	—	—	—
1870	—	—	—	—	1,693,229	—	—	—	—
1871	—	30,148	—	—	2,866,376	—	—	—	—
1872	255,646	489,428	1,666,200	—	5,131,141	68,746	—	—	—
1873	256,547	561,818	13,859,080	—	5,019,240	99,517	—	—	—
1874	1,189,592	310,225	4,927,061	—	3,614,899	135,963	—	—	—
1875	1,714,830	1,546,242	—	—	3,426,100	189,484	—	—	46,087
1876	2,388,733	3,346,567	—	—	1,108,322	267,840	—	—	42,546
1877	4,131,375	1,691,150	—	—	1,318,352	258,833	—	—	200,000
1878	3,843,339	2,228,373	—	—	408,817	170,120	—	—	6,551
1879	3,064,099	2,240,286	—	—	226,639	77,179	—	—	40,129
1880	2,123,366	4,044,523	—	—	2,048,015	8,730	—	—	16,540
1881	2,077,029	4,968,504	—	334,681	608,733	187,370	—	—	—
1882	1,647,759	4,580,076	—	511,882	585,569	70,949	—	—	402
1883	1,763,002	10,033,800	—	556,870	1,616,633	119,869	—	—	57,186
1884	1,577,295	11,192,722	7,172,298	723,658	2,689,690	491,376	—	—	130,663
1885	1,504,621	9,900,282	5,420	303,593	1,247,006	182,306	—	—	76,957
1886	1,333,325	3,672,585	3,113,334	130,653	765,967	569,202	—	—	4,668
1887	1,783,698	915,057	—	162,392	926,030	353,044	—	—	5,800
1888	1,033,118	52,099	—	135,048	1,713,487	963,778	—	—	—
1889	972,918	86,716	—	130,684	2,623,137	575,408	—	—	—
1890	1,026,364	40,981	—	133,832	2,351,787	3,220,926	—	—	—
1891	1,280,725	37,367	—	94,847	1,184,318	515,702	—	—	—
1892	1,463,279	66,212	—	86,735	316,784	224,390	—	—	8,300
1893	2,069,573	413,837	—	115,038	299,081	181,878	—	—	—
1894	3,027,164	146,540	—	149,147	439,209	102,059	—	—	—
1895	2,452,274	49,209	—	99,842	327,605	102,393	—	—	—
1896	2,258,779	65,669	—	82,184	260,396	114,826	—	—	—
1897	2,348,637	14,054	—	91,412	190,570	129,238	—	—	—
1898	3,207,250	692	—	127,595	252,756	364,018	—	—	17,542
1899	3,899,877	8,419	267,026	151,213	1,081,930	385,094	—	—	22,000
1900	2,639,565	236	—	199,470	3,255,348	1,089,827	—	—	53,546
1901	2,360,570	8,979	—	269,061	3,633,837	1,006,983	—	—	280,174
1902	2,114,690	449	—	370,838	4,626,841	2,190,125	—	—	475,998
1903	1,823,274	—	—	449,542	2,254,267	1,268,004	—	—	829,414
1904	1,880,787	33,076	—	748,855	1,879,566	1,334,397	—	6,249	698,878
1905	2,071,594	—	—	794,410	4,755,578 ¹	1,642,042	—	778,491	591,413
1906	1,552,121	—	—	599,780	3,765,171	2,359,528	—	1,841,270	496,125
1907	837,839	—	—	526,583	1,512,491 ²	1,797,871	—	537,867	91,210
1908	1,725,156	600	—	768,244	4,369,738	2,969,049	—	18,910,253	390,962
1909	1,873,868	938	—	797,747	3,874,480	2,832,295	92,428	31,317,132	561,207
1910	1,650,707	—	—	785,157	1,278,409	4,514,606	53,043	19,868,064	206,397
1911	2,349,475	2,918	—	—	763,833	3,742,717	184,150	23,715,549	94,321
1912	2,560,938	—	—	—	1,710,449	4,116,385	159,632	22,264,130	128,042
1913	2,259,642	—	—	—	2,406,988 ³	6,057,515	1,099,063	15,279,837	103,001
1914	2,829,661	—	—	—	4,348,000	10,100,017	4,498,717	15,274,206	129,575
1915	5,490,796	—	—	—	6,914,977	11,049,030	4,773,744	12,648,242	570,531
1916	6,170,953	—	—	—	7,861,899	8,471,229	4,887,131	9,825,265	1,350,473
1917	4,304,589	—	—	—	4,873,032	7,838,116	2,604,280	6,650,263	609,752
1918	1,781,957	—	—	—	—	6,347,201	1,879,699	103,167	—
1919	2,211,964	—	—	—	—	5,705,348	562,558	1,723,638	—
1920	4,550,761	—	—	—	3,285,736	38,869,683	235,608	527,480	3,540 ⁶
1921	5,450,006	—	—	—	731,018	27,559,809	30,036	20,164	—
1922	4,482,610	—	—	—	9,649	10,431,699	34,770	—	97,000
1923	4,995,184	—	—	—	59,950	3,411,510	27,803	—	—
1924	6,747,395	—	—	—	—	3,804,427	207,872	—	196,418

¹Including \$2,725,504 for the improvement of the St. Lawrence, spent during the previous years by Montreal Harbour Commission.²Including \$17,956, cost of new car for the Governor-General.³Including \$38,583, cost of new car for the Governor-General.⁴Including \$15,000, cost of new car for the Governor-General.⁵Includes New Brunswick Railway.⁶Nine months.

Expenditure, 1868-1924—concluded.

North-west Territories.	Militia.	Canadian Government Railways.	Total Capital Expenditure.	Other Disbursements.			Total Disbursements.	Years.
				Railway Subsidies.	War and Demobilization.	Other Charges.		
\$	\$	\$	\$	\$	\$	\$	\$	
-	-	-	548,438	-	-	37,158	14,071,689	1868
19,113	-	-	440,418	-	-	429,663	14,908,166	1869
1,821,887	-	-	3,515,116	-	-	155,988	18,016,614	1870
773,872	-	-	3,670,396	-	-	-	19,293,478	1871
241,889	-	-	7,853,050	-	-	223,456	25,665,975	1872
63,239	-	-	19,859,441	-	-	5,719	39,039,808	1873
-	-	-	10,177,740	-	-	4,019	33,498,076	1874
-	-	-	6,922,743	-	-	2,253,097	32,888,911	1875
-	-	-	7,154,008	-	-	315,764	31,958,144	1876
-	-	-	7,599,710	-	-	1,388,984	32,507,996	1877
-	-	-	6,657,200	-	-	385,413	30,545,772	1878
-	-	-	5,648,332	-	-	676,225	30,779,939	1879
-	-	-	8,241,174	-	-	949,948	34,041,756	1880
-	-	-	8,176,317	-	-	117,772	33,796,643	1881
-	-	-	7,405,637	-	-	201,885	34,674,625	1882
-	-	-	14,147,360	-	-	21,369	42,898,886	1883
-	-	-	23,977,702	208,000	-	2,567,453	57,860,862	1884
-	-	-	13,220,185	403,245	-	502,587	49,163,078	1885
-	-	-	9,589,734	2,701,249	-	10,534,973	61,837,569	1886
293,918	-	-	4,439,939	1,406,533	-	-	41,504,152	1887
539,930	-	-	4,437,460	1,027,042	-	155,623	45,064,124	1888
31,448	-	-	4,420,313	846,722	-	1,333,328	43,518,198	1889
4,773	-	-	6,778,663 ¹	1,678,196	-	44,947	41,770,333	1890
2,901	-	-	3,115,860	1,265,706	-	68,074	40,793,208	1891
-1,243	-	-	2,164,457	1,248,216	-	2,093,569	42,272,136	1892
8,911	-	-	3,088,318	811,394	-	139,963	40,853,728	1893
-1,149	-	-	3,862,970	1,229,885	-	330,354	43,008,234	1894
-833	-	-	3,030,490	1,310,549	-	399,294	42,872,338	1895
-543	1,000,000	-	3,781,311	3,228,746	-	137,185	44,096,384	1896
3,284	745,965	-	3,523,160	416,955	-	682,881	42,972,756	1897
-1,272	173,740	-	4,142,231	1,414,935	-	944,589	45,334,281	1898
-1,853	387,810	-	6,201,516	3,201,220	-	256,399	51,542,635	1899
-1,473	230,851	-	7,467,370	725,720	-	1,549,098	52,717,467	1900
-1,632	135,885	-	7,693,857	2,512,329	-	900,312	57,982,866	1901
-1,543	299,697	-	10,077,095	2,093,939	-	1,040,374	63,970,800	1902
-3,040	428,223	-	7,049,684	1,463,222	-	1,541,763	61,749,572	1903
-2,616	1,299,910	-	7,879,102	2,046,878	-	6,716,235	72,255,048	1904
-2,478	1,299,964	-	11,931,014	1,275,630	-	2,277,812	78,804,139	1905
-1,767	1,299,876	-	11,912,104	1,637,574	-	2,487,323	83,277,642	1906
-1,352	975,283	-	11,327,792	1,324,889	-	1,533,297	65,778,139	1907
-911	1,297,905	-	30,428,996	2,037,629	-	3,470,603	112,578,680	1908
-1,045	1,243,072	-	42,592,122	1,785,887	-	4,999,283	133,441,524	1909
-650	1,299,970	-	29,655,703	2,048,097	-	4,280,227	115,395,774	1910
-33,688	-	-	30,813,767	1,284,892	-	2,988,393	122,861,250	1911
-	-	-	30,939,576	859,400	-	7,181,665	137,142,082	1912
-	-	-	27,206,046	4,935,507	-	255,787	144,456,878	1913
-	-	-	37,180,176	19,036,237	-	2,640,162	186,241,048	1914
-	-	-	41,447,320	5,191,507	60,750,476	5,186,016	248,098,526	1915
-	-	-	38,566,950	1,400,171	166,197,755	3,186,898	339,702,502	1916
-	-	-	26,880,032	959,584	306,488,815	15,275,345	498,203,118	1917
-	32,999,880	-	43,111,904	720,405	343,836,802	10,706,787	576,660,210	1918
-	14,827,758	-	25,031,266	43,895	446,519,440	-7,283,582	697,042,212	1919
-	6,221,774	-	69,301,878	334,845	346,612,955	19,995,313	786,030,611	1920
-	-	-	40,012,807	-	16,997,544	492,048	528,302,513	1921
-	1,239,605	-	16,295,333	-	1,544,250	301,518	463,528,389	1922
-	1,313,022	-	9,807,124	-	4,464,760	4,042,931	434,735,277	1923
-	-94,835	-	10,861,277	-1,523	446,083	7,902,759	370,589,247	1924

¹Includes Advances to Railways (non-active) amounting to \$45,780,690 in 1920, \$109,662,655 in 1921, \$97,950,645 in 1922, \$77,863,938 in 1923 and \$23,710,617 in 1924, together with advances of \$5,979,856 in 1923 and \$1,500,000 in 1924 to the Canadian Government Merchant Marine, Ltd.

5.—Principal Items of Receipts of Canada on Consolidated Fund Account, 1868-1924.

Fiscal years.	Customs taxes.	Excise taxes.	War tax revenue. ¹	Total revenue from taxation. ²	Interest on investments.	Post office and money orders.	Total revenue receipts. ³
	\$	\$	\$	\$	\$	\$	\$
1868.....	8,578,380	3,002,588	—	11,700,681	174,073	525,692	13,687,928
1869.....	8,272,880	2,710,028	—	11,112,573	824,424	535,315	14,379,175
1870.....	9,334,213	3,619,623	—	13,087,882	383,956	573,566	15,512,226
1871.....	11,841,105	4,295,945	—	16,320,369	554,384	612,631	19,335,561
1872.....	12,787,982	4,735,652	—	17,715,552	488,042	692,375	20,714,814
1873.....	12,954,164	4,460,682	—	17,616,555	396,404	833,657	20,813,469
1874.....	14,325,193	5,594,904	—	20,129,185	610,863	1,139,973	24,205,093
1875.....	15,351,012	5,069,687	—	20,664,879	840,887	1,155,332	24,648,715
1876.....	12,823,838	5,563,487	—	18,614,415	798,906	1,102,540	22,587,587
1877.....	12,546,988	4,941,898	—	17,697,925	717,684	1,114,946	22,059,274
1878.....	12,782,824	4,858,672	—	17,841,938	791,758	1,207,790	22,375,011
1879.....	12,900,659	5,390,763	—	18,476,613	592,500	1,172,418	22,517,382
1880.....	14,071,343	4,232,428	—	18,479,577	834,793	1,252,498	23,307,407
1881.....	18,406,092	5,343,022	—	23,942,139	751,513	1,352,110	29,635,298
1882.....	21,581,570	5,884,860	—	27,549,047	914,009	1,587,888	33,383,456
1883.....	23,009,582	6,260,117	—	29,269,699	1,001,193	1,800,391	35,794,650
1884.....	20,023,890	5,459,309	—	25,483,199	980,698	1,755,674	31,861,962
1885.....	18,935,428	6,449,101	—	25,384,529	1,997,035	1,841,372	32,797,001
1886.....	19,362,308	5,852,905	—	25,226,456	2,299,079	1,901,690	33,177,040
1887.....	22,373,951	6,308,201	—	28,687,002	990,887	2,020,624	35,704,993
1888.....	22,091,682	6,071,487	—	28,177,413	932,025	2,379,242	35,906,464
1889.....	23,699,413	6,886,739	—	30,613,523	1,305,392	2,220,504	38,782,870
1890.....	23,913,546	7,618,118	—	31,587,072	1,082,271	2,357,389	39,799,925
1891.....	23,305,216	6,914,850	—	30,314,151	1,077,228	2,515,823	38,579,311
1892.....	20,361,382	7,945,098	—	28,446,157	1,086,420	2,652,746	36,921,872
1893.....	20,910,662	8,367,364	—	29,321,367	1,150,167	2,773,508	38,168,609
1894.....	19,119,030	8,381,089	—	27,579,203	1,217,809	2,809,341	36,374,643
1895.....	17,585,741	7,805,733	—	25,446,199	1,336,047	2,792,790	33,978,129
1896.....	19,766,741	7,926,006	—	27,759,285	1,370,001	2,964,014	36,618,591
1897.....	19,386,278	9,170,379	—	28,648,626	1,443,004	3,202,938	37,859,778
1898.....	21,622,789	7,871,563	—	29,576,456	1,513,455	3,527,810	40,555,238
1899.....	25,150,745	9,641,227	—	34,958,069	1,590,448	3,193,778	46,741,249
1900.....	28,219,458	9,868,075	—	38,242,223	1,683,051	3,205,535	51,029,994
1901.....	28,293,930	10,318,206	—	38,743,550	1,784,834	3,441,505	52,514,701
1902.....	31,916,394	11,197,134	—	43,389,112	1,892,224	3,918,416	58,050,790
1903.....	36,738,033	12,013,779	—	49,015,506	2,020,953	4,397,833	66,037,069
1904.....	40,461,591	12,958,708	—	53,661,319	2,236,256	4,652,325	70,669,817
1905.....	41,437,569	12,586,475	—	54,020,124	2,105,031	5,125,373	71,182,773
1906.....	46,053,377	14,010,220	—	60,074,818	2,140,312	5,933,343	80,139,360
1907 ⁴	39,717,079	11,805,413	—	51,565,586	1,235,746	5,061,728	67,969,328
1908.....	57,290,276	15,782,152	—	73,325,663	1,925,569	7,107,887	96,054,506
1909.....	47,088,444	14,937,768	—	62,353,093	2,256,643	7,401,624	85,093,404
1910.....	50,767,681	15,253,353	—	75,409,487	2,807,465	7,958,548	101,503,711
1911.....	71,838,089	16,869,837	—	89,835,232	1,668,773	9,146,952	117,780,499
1912.....	85,051,872	19,261,662	—	105,847,304	1,281,317	10,492,394	136,108,217
1913.....	111,764,699	21,447,445	—	135,002,358	1,430,511	12,051,729	168,689,263
1914.....	104,691,238	21,452,037	—	127,478,067	1,964,541	12,954,530	163,174,395
1915.....	75,941,220	21,479,731	98,057	97,813,498	2,980,247	13,046,665	133,073,482
1916.....	98,649,409	22,428,492	3,620,782	124,666,969	3,553,210	18,858,690	172,147,894
1917.....	134,043,842	24,412,348	16,302,238	174,845,353	3,094,012	20,902,384	232,701,298
1918.....	144,172,630	27,168,445	25,379,901	196,929,942	4,466,724	21,345,394	260,778,953
1919.....	147,169,188	30,342,034	56,177,508	235,715,399	7,421,002	21,603,542	312,946,747
1920.....	168,796,823	42,698,083	82,079,801	293,706,841	17,086,981	24,471,709	349,746,335
1921.....	163,266,804	37,118,367	168,385,327	369,010,605	24,815,246	26,706,198	434,386,537 ⁵
1922.....	105,686,645	36,755,207	177,484,161	320,320,945	21,961,513	26,402,299	381,952,387 ⁵
1923.....	118,056,469	35,761,997	181,634,875	335,654,799	16,465,303	29,016,771	394,614,900 ⁶
1924.....	121,500,769	38,181,747	182,036,261	342,044,569	11,916,479	28,865,374	396,837,682 ⁶

¹ For detailed statement see Table 7.² Includes Chinese revenues and other small amounts in earlier years.³ Includes various smaller items of revenue receipts.⁴ Nine months.⁵ Exclusive of special receipts of \$1,905,648 in 1921, \$319,184 in 1922, \$8,479,310 in 1923 and \$9,745,158 in 1924. See note 2, to Table 2 of this section.

6.—Population, per capita Taxation, Total Revenue Receipts, Expenditure on Consolidated Fund Account and Total Disbursements, 1868-1924.

Years.	Popula- tion.	Per Capita Reve- nue from Tax- ation.	Per Capita Total Reve- nue Re- ceipts.	Per Capita Ex- pend- iture on Con- sol- idated Fund Account.	Per Capita Total Dis- burse- ments.	Yrs.	Popula- tion.	Per Capita Reve- nue from Tax- ation.	Per Capita Total Reve- nue Re- ceipts.	Per Capita Ex- pend- iture on Con- sol- idated Fund Ac- count.	Per Capita Total Dis- burse- ments.
	No.	\$	\$	\$	\$		No.	\$	\$	\$	\$
1868...	3,372,000	3.47	4.05	4.00	4.17	1895...	5,034,000	5.05	6.75	7.58	8.52
1869...	3,413,000	3.26	4.21	4.11	4.37	1896...	5,086,000	5.46	7.20	7.26	8.67
1870...	3,454,000	3.79	4.29	4.15	5.22	1897...	5,142,000	5.57	7.36	7.46	8.36
1871*...	3,485,761	4.68	5.55	4.48	5.53	1898...	5,199,000	5.69	7.80	7.47	8.72
1871...	3,518,000	4.64	5.50	4.44	5.48	1899...	5,259,000	6.65	8.89	7.97	9.80
1872...	3,611,000	5.04	5.74	4.87	7.11	1900...	5,322,000	7.19	9.59	8.07	9.90
1873...	3,668,000	4.80	5.67	5.23	10.64	1901*	5,371,315	7.21	9.78	8.72	10.79
1874...	3,825,000	5.26	6.33	6.10	8.76	1901...	5,403,000	7.17	9.72	8.67	10.73
1875...	3,887,000	5.32	6.34	6.10	8.46	1902...	5,532,000	7.84	10.49	9.18	11.56
1876...	3,949,000	4.71	5.70	6.20	8.09	1903...	5,673,000	8.64	11.64	9.11	10.88
1877...	4,013,000	4.41	5.50	5.86	8.10	1904...	5,825,000	9.21	12.13	9.55	12.40
1878...	4,079,000	4.37	5.49	5.76	7.49	1905...	5,992,000	9.02	11.88	10.57	13.15
1879...	4,146,000	4.46	5.43	5.90	7.42	1906...	6,171,000	9.74	12.99	10.90	13.49
1880...	4,215,000	4.38	5.53	5.90	8.08	1907...	6,302,000	8.18	10.71	8.18	10.44
1881*...	4,324,810	5.54	6.85	5.90	7.82	1908...	6,491,000	11.30	14.80	11.81	17.34
1881...	4,337,000	5.52	6.83	5.88	7.79	1909...	6,695,000	9.31	12.71	12.56	19.93
1882...	4,384,000	6.28	7.62	6.18	7.91	1910...	6,917,000	10.90	14.67	11.48	16.68
1883...	4,433,000	6.60	8.08	6.48	9.68	1911*	7,206,643	12.47	16.34	12.18	17.04
1884...	4,485,000	5.68	7.11	6.94	12.90	1912...	7,365,205	14.37	18.48	13.33	18.62
1885...	4,539,000	5.59	7.23	7.72	10.80	1913...	7,527,208	17.94	22.41	14.89	19.19
1886...	4,589,000	5.50	7.23	8.50	13.48	1914...	7,692,832	16.57	21.21	16.56	24.21
1887...	4,638,000	6.19	7.71	7.69	8.95	1915...	7,862,078	12.44	16.93	17.24	31.56
1888...	4,688,000	6.01	7.66	7.84	9.61	1916...	8,035,584	15.51	21.42	16.22	42.27
1889...	4,740,000	6.46	8.19	7.79	9.18	1917...	8,180,160	21.37	28.45	18.17	60.93
1890...	4,793,000	6.59	8.33	7.52	8.71	1918...	8,328,382	23.65	31.31	21.41	69.24
1891*...	4,833,239	6.27	7.98	7.52	8.44	1919...	8,478,546	27.80	36.92	27.45	82.21
1891...	4,844,000	6.26	7.96	7.50	8.42	1920...	8,631,475	34.03	40.52	35.20	91.07
1892...	4,889,000	5.82	7.55	7.52	8.65	1921*	8,788,483	41.99	49.43	41.09	60.11
1893...	4,936,000	5.94	7.73	7.46	8.28	1922...	8,940,150	35.82	42.72	38.48	51.85
1894...	4,984,000	5.64	7.29	7.54	8.79	1923...	9,082,840	36.95	43.45	36.48	47.86
						1924...	9,226,740	37.07	43.01	35.20	40.16

NOTE.—The years marked with an asterisk (*) are those of the Census, April 2, 1871, April 4, 1881, April 6, 1891, April 1, 1901, June 1, 1911 and 1921. In all other cases down to 1910 the population is estimated at the close of each fiscal year; June 30 from 1868 to 1906, and March 31 from 1907 to 1910. For the inter-censal years 1912 to 1920, and also for 1922 to 1924, the population is estimated as at June 1. The fiscal period of 1907 is for the nine months ended March 31.

3.—War Tax Revenue.

In Tables 7, 8, 9 and 10 are given statistics of revenue collected by war taxes for the fiscal year 1924 and previous years; in Table 7 by sources for the years 1915 to 1924, in Table 8 by items for the last six fiscal years, in Table 9 by collections of the Customs and Excise Dept. by provinces for the last fiscal year and in Table 10 by Income and Business Profits War Taxes for the fiscal years 1923 and 1924.

7.—War Tax Revenue during the fiscal years ended March 31, 1915-1924.

Years.	Banks.	Trust and Loan Companies.	Insurance Companies.	Business Profits.	Income Tax.	Customs and Excise Department. ¹	Total War Tax Revenue.
	\$	\$	\$	\$	\$	\$	\$
1915.....	—	—	—	—	—	98,057	98,057
1916.....	1,300,447	324,250	459,247	—	—	1,536,838	3,620,782
1917.....	1,114,023	202,415	419,699	12,506,517	—	2,059,584	16,302,238
1918.....	1,115,758	269,129	496,540	21,271,084	—	2,227,390	25,379,901
1919.....	1,099,764	323,340	546,114	32,970,062	9,349,720	11,888,508	56,177,508
1920.....	1,170,223	274,216	638,731	44,145,184	20,263,740	15,587,707	82,079,801
1921.....	1,257,534	293,802	807,667	40,841,401	46,381,824	78,803,099	168,385,327
1922.....	1,293,697	283,994	749,959	22,815,667	78,684,355	73,656,489	177,484,161
1923.....	1,244,437	312,302	852,328	13,031,462	59,711,538	106,482,718	181,634,875
1924.....	1,236,957	308,632	857,587	4,752,681	54,204,028	120,676,376	182,036,261
Total.....	10,832,840	2,592,170	5,827,872	192,334,058	268,595,205	413,016,766	893,198,911

¹ Amounts paid in to Receiver-General.

8.—Summary of War Tax Revenue collected by the Department of Customs and Excise during the fiscal years ended March 31, 1919-1924.

(Accrued Revenue.)

Items.	1919.	1920.	1921.	1922.	1923.	1924.
	\$	\$	\$	\$	\$	\$
Licenses.....	—	—	179,080	119,118	68,420	58,020
Stamps.....	1,151,648	1,169,709	5,877,503	2,143,105	5,018,449	8,175,301
Matches.....	1,534,591	2,781,112	2,788,950	2,694,114	2,676,847	2,602,109
Automobiles.....	3,784,256	6,537,810	6,492,313	59,964	1,362,597	2,689,400
Confectionery.....	—	—	1,319,955	350,524	442,271	176,564
Playing cards.....	126,443	182,016	250,240	231,071	206,627	176,760
Cigars.....	—	—	—	—	289,524	357,495
Wines.....	—	—	72,696	122,974	159,370	151,580
Ale, beer and porter.....	—	—	4,942,882	1,246,523	2,612,463	4,234,539
Whiskey.....	—	—	3,687,599	708,544	—	—
Beverages.....	—	—	—	—	372,235	162,282
Jewelry.....	412,337	748,329	1,044,176	108,147	—	—
Tea.....	2,814,808	287,074	4,329	—	—	—
Musical rolls, records, films, etc.....	596,219	1,276,036	807,227	12,975	—	—
Transportation.....	1,475,416	2,170,702	2,633,306	2,534,170	2,234,091	2,400,431
Embossed cheques.....	—	438,507	1,145,446	840,279	161,601	305,445
Embossed cheques (Departmental).....	—	—	—	—	355,141	352,120
Sales, domestic.....	—	—	27,909,902	44,820,162	62,685,520	71,834,937
Other domestic war tax revenue.....	—	—	133,442	—	—	—
Domestic, Total.....	11,895,718	15,591,295	59,289,046	55,991,670	78,645,156	93,676,983
Importations—						
Sales.....	—	—	10,218,161	16,698,589	28,576,735	29,155,141
Excise.....	—	—	9,839,608	1,212,355	768,002	836,723
Total Excise Taxes.....	11,895,718	15,591,295	78,820,484	73,902,614	107,989,893	123,668,847

¹ Less refunds of \$526,331.

9.—War Tax Revenue collected by the Customs and Excise Department, by Provinces, during the fiscal year ended March 31, 1924.

(Accrued Revenue.)

Provinces.	Licenses.	Stamps.	Matches.	Automobiles.	Sales.	Confectionery.
	\$	\$	\$	\$	\$	\$
Prince Edward Island.....	291	26,953	—	—	66,132	123
Nova Scotia.....	2,417	229,164	—	1,107	1,186,491	20,261
New Brunswick.....	1,998	195,479	—	39,818	1,089,489	11,546
Quebec.....	15,966	2,207,503	1,728,975	144,337	23,347,243	23,268
Ontario.....	26,281	3,354,419	873,134	2,245,946	36,837,768	90,185
Manitoba.....	3,005	722,284	—	50,453	3,393,628	18,418
Saskatchewan.....	1,098	434,355	—	96,127	963,015	518
Alberta.....	2,185	435,240	—	58,111	1,478,486	3,672
British Columbia.....	4,719	567,321	—	53,478	3,462,452	8,573
Yukon.....	60	2,583	—	23	1,233	—
Total.....	58,920	8,175,301	2,602,109	2,689,400	71,834,937	176,564

Provinces.	Playing Cards.	Cigars.	Wines.	Ale, Beer and Porter.	Beverages.	Transportation.
	\$	\$	\$	\$	\$	\$
Prince Edward Island.....	—	—	—	—	681	—
Nova Scotia.....	—	142	—	7,985	2,219	19,314
New Brunswick.....	—	669	—	36,650	4,476	30,231
Quebec.....	62,712	231,880	969	3,166,547	23,564	1,855,884
Ontario.....	114,048	114,226	149,109	446,676	107,333	437,801
Manitoba.....	—	82	705	192,511	5,559	8,752
Saskatchewan.....	—	—	—	24,985	2,117	93
Alberta.....	—	1,144	—	131,211	11,957	6,207
British Columbia.....	—	9,352	797	227,974	4,373	42,144
Yukon.....	—	—	—	—	3	5
Total.....	176,760	357,495	151,580	4,234,539	162,282	2,400,431

Provinces.	Embossed Cheques and Receipts.	Domestic Total.	Importations.		Total.
			Sales.	Excise.	
	\$	\$	\$	\$	\$
Prince Edward Island.....	56	94,236	34,643	477	129,356
Nova Scotia.....	847	1,469,947	573,274	18,681	2,061,902
New Brunswick.....	10,425	1,429,781	664,832	15,087	2,109,700
Quebec.....	113,139	32,921,987	8,022,180	179,691	41,123,858
Ontario.....	116,067	44,912,992	14,140,186	506,333	59,559,511
Manitoba.....	47,016	4,442,413	1,856,720	25,524	6,324,657
Saskatchewan.....	4,590	1,526,898	528,017	8,969	2,063,884
Alberta.....	2,758	2,130,971	595,568	12,261	2,738,800
British Columbia.....	10,547	4,391,731	2,716,984	69,489	7,178,204
Yukon.....	—	3,907	20,428	211	24,546
Total.....	305,445	93,324,863	29,152,832	836,723	123,314,418
British Post Office Parcels.....	—	—	2,309	—	2,309
Embossed Cheques (Departmental).....	—	—	—	—	352,120
Grand Total.....	—	—	29,155,141	—	123,668,847

10.—Statement showing Amounts collected under the Income War Tax Act and the Business Profits War Tax Act, by Provinces, for the fiscal years ended March 31, 1923 and 1924.

Provinces.	1923.			1924.		
	Income War Tax.	Business Profits War Tax.	Total.	Income War Tax.	Business Profits War Tax.	Total.
Prince Edward Island.....	\$ 88,906	\$ —	\$ 88,906	\$ 52,544	\$ —	\$ 52,544
Nova Scotia.....	1,603,695	154,101	1,757,796	1,074,705	72,672	1,147,377
New Brunswick.....	1,044,080	127,144	1,171,224	679,185	133,027	812,212
Quebec.....	21,862,760	3,579,030	25,441,795	19,566,412	1,464,644	21,031,056
Ontario.....	25,435,613	6,144,924	31,580,537	24,666,094	2,122,819	26,788,913
Manitoba.....	4,348,513	913,597	5,262,110	3,878,239	380,087	4,258,326
Saskatchewan.....	1,527,606	219,563	1,747,169	1,125,926	89,068	1,214,994
Alberta.....	1,577,391	594,757	2,172,148	1,395,847	144,830	1,540,677
British Columbia.....	3,641,301	1,151,297	4,792,598	3,646,964	195,108	3,842,072
Yukon.....	39,935	—	39,935	52,848	—	52,848
Interest.....	—	147,044	147,044	—	150,426	150,426
Gross Total.....	61,169,800	13,031,462	74,201,262	56,138,764	4,752,681	60,891,445
Less Refunds.....	1,458,262	—	1,458,262	1,934,736	—	1,934,736
Net Total.....	59,711,538	13,031,462	72,743,000	54,204,028	4,752,681	58,956,709

4.—Inland Revenue.

Under the Inland Revenue Act (R.S. 1906, c. 5), the Department of Inland Revenue until 1918 had the control and management of standard weights and measures and of the collection of excise duties, of stamp duties, internal taxes, bridge and ferry tolls and rents. It administered the statutes which dealt with the adulteration of food and other articles, electricity and gas inspection, patent medicines, petroleum, naphtha and the analysis of fertilizers and feeding stuffs. The Department also established the food standards, which were put into force by Orders in Council under the authority of section 26 of the Adulteration Act. By Order in Council, dated May 18, 1918, the Department of Customs and the Department of Inland Revenue were amalgamated and combined under the name of the Department of Customs and Inland Revenue, under one Minister of the Crown. By Order in Council dated June 3, 1918, the administration of the Gas, Electric Light and Weights and Measures Inspection Acts, the Adulteration of Food, Commercial Feeding Stuffs, Fertilizers, Proprietary and Patent Medicine and Inspection of Water Meters Acts was transferred to the Department of Trade and Commerce, as from September 1, 1918. On June 4, 1921, the Department of Customs and Inland Revenue was consolidated, under one Minister, as the Department of Customs and Excise (11-12 George V, c. 26). For the year ended March 31, 1924, the total inland revenue of the Dominion amounted to \$162,284,885, as compared with \$144,249,547 in 1923.

Canadian Excise Tariff.—The following is a statement of the Canadian excise tariff, as existing on July 1, 1924:

Spirits—			
When made from raw grain, per proof gal.	\$9.00	Tobacco, per lb.	\$0.20
When made from malted barley.	9.02	Cigarettes, weighing not more than 3 lb. per thousand.	6.00
When made from imported molasses or other sweetened matter free of customs duty, per proof gal.	9.03	Cigarettes, weighing more than 3 lb. per thousand.	11.00
Malt, per lb.	0.03	Foreign raw leaf tobacco, unstemmed, per standard lb.	0.40
Malt, imported, crushed or ground, per lb.	0.05	Foreign raw leaf tobacco, stemmed, per standard lb.	0.60
Malt liquor, when made in whole or part from any other substance than malt, per gal.	0.15	Canada twist tobacco, per lb.	0.20
		Snuff, per lb.	0.20
		Cigars, per M.	3.00
		Cigars, when put up in packages of less than 10 each, per M.	4.00

When, however, any person is licensed by the Minister of Customs and Excise to manufacture patent and proprietary medicines, extracts, essences and pharmaceutical preparations by the use of spirits in bond, subject to the Inland Revenue Act and regulations thereunder, the following duties of excise are collected; when made from raw grain, \$2.40 per proof gallon; when made from malted barley, \$2.42 per proof gallon; when made from imported molasses or other sweetened matter free of customs duty, \$2.43 per proof gallon. Druggists licensed by the Minister of Customs and Excise to prepare prescriptions for medicines and pharmaceutical preparations, are also allowed to use limited quantities of spirits testing not less than 50 p.c. over proof on payment of the above lower manufacturers' rates of duty. A drawback of 99 p.c. of the duty may be granted when spirits testing not less than 50 p.c. over proof are delivered in limited quantities to universities, scientific or research laboratories or hospitals for medicinal purposes only.

In Table 11 are set out the various sources of inland revenue for the years 1919 to 1924, the last fiscal year showing an increase over the previous year of \$18,035,338, due to the increased amount collected in 1924 as war taxes. The increase in this item over 1923 was \$15,678,954. Tables 12 and 13 show statistics of excise licenses issued in the fiscal years 1919 to 1924 and of distillation during the last five fiscal years.

11.—Excise and other Inland Revenues for the fiscal years 1919-1924.

Sources of Revenue.	1919.	1920.	1921.	1922.	1923.	1924.
	\$	\$	\$	\$	\$	\$
Acetic acid.....	6,795	6,007	1,955	100	100	100
Cigars.....	1,261,915	1,629,254	1,293,655	1,095,170	622,035	608,685
Malt.....	1,477,792	2,101,939	2,468,476	2,628,995	2,549,601	3,280,057
Malt liquor.....	19,082	76,502	84,301	61,531	60,331	93,072
Manufactures in bond.....	118,856	124,171	76,508	16,525	18,225	18,725
Methylated spirits.....	322,583	508,406	405,457	—	—	—
Seizures.....	42,021	213,167	174,523	—	—	—
Spirits.....	6,964,415	8,950,241	5,757,463	6,224,061	7,985,808	9,371,063
Tobacco.....	20,248,335	29,455,255	27,132,933	26,876,807	25,013,128	25,236,296
Wartax, revenue stamps, etc.	11,964,740	15,744,040	79,346,815	73,902,614	107,989,893	123,668,847
Weights and measures, gas and law stamps.....	8,628 ¹	7,490 ¹	9,423 ¹	—	—	—
Other revenues.....	70,827	112,064	165,482	6,700	10,426	8,040
Total.....	42,505,989	58,928,536	116,916,991	110,812,503	144,249,547	162,284,885

¹Law Stamps only.

12.—Number of Excise Licenses issued during the fiscal years 1919-1924.

Description.	1919.	1920.	1921.	1922.	1923.	1924.
Distillers.....	14	12	12	10	11	14
Brewers and maltsters.....	81	75	73	79	74	75
Tobacco manufacturers.....	72	87	85	81	76	73
Cigar manufacturers.....	165	155	147	152	140	126
Petroleum refineries.....	11	13	12	14	16	16
Manufacturers in Bond—						
Vinegar distillers.....	19	19	18	1	—	—
Perfumes, pharmaceutical preparations, etc.....	82	178	233	334	354	371
Chemical stills.....	122	129	140	149	163	166
Wood alcohol manufacturers.....	12	12	12	12	9	6
Malt vinegar brewers.....	2	3	3	3	3	3
Malt products.....	—	1	1	—	—	—
Still manufacturers and importers.....	3	6	4	14	10	16
Acetic acid manufacturers.....	2	2	2	2	2	2
Bonded warehouses.....	135	85	49	45	49	50
Explosives.....	5	2	—	—	—	—
Rectifiers.....	5	3	1	1	1	1
Compounders.....	—	—	—	—	—	2

13.—Statistics of Distillation for the fiscal years 1920-1924.

Schedule.	1920.	1921.	1922.	1923.	1924.
Licenses issued.....No.	14	14	10	12	14
License fees.....\$	3,500	3,250	2,500	2,750	3,375
Grain, etc., for distillation—					
Malt.....lb.	524,832	1,671,298	4,084,925	4,222,031	4,847,035
Indian corn.....“	7,044,316	18,111,700	33,210,842	12,596,833	25,969,850
Rye.....“	1,170,162	4,254,150	9,168,125	9,936,928	11,866,009
Oats.....“	28,700	133,980	185,260	88,310	1,104,540
Wheat.....“	482,596	69,740	220,755	—	188,044
Total grain.....“	9,250,606	24,240,868	46,869,907	26,844,102	43,925,478
Molasses.....“	34,072,251	54,848,675	44,996,266	45,009,401	38,894,109
Proof spirits manufactured.....gal.	2,356,329	4,194,691	5,050,188	3,828,879	4,411,896
Duty collected ex-manufactory on deficiencies and assessments—					
Gallons.....	388	3,551	6,747	204	638
Amount.....\$	931	8,536	16,192	1,840	5,746
Total duty collected plus license fees.....\$	4,431	15,681	18,692	4,590	9,121
Vinegar.....gal.	2,693,779	880,982	—	—	—
Acetic acid.....“	147,669	46,375	—	—	—

¹For April, May and June only. Regulations changed July 20, and duty taken off from that date.

Consumption of Alcohol and Tobacco.—In Tables 14 and 15 are shown the quantities of spirits, malt liquor and tobacco taken out of bond for consumption in the fiscal years 1919 to 1924 and the annual consumption per head of population of spirits, wine, beer and tobacco, together with the duties per head paid on these goods. Until recent years, spirits and tobacco were the most important sources of inland revenue. Owing to the imposition of war taxes, revenues derived from them have fallen from 65 p.c. of the total of inland revenue in 1920 to 21 p.c. of the total in 1924. This is accounted for mainly by the increase in the volume of war taxes collected, but to some extent also by the decrease in the consumption of wine and spirits. The consumption of cigars also fell from 270,089,761 in 1920 to 183,965,151 in 1923, a decline of more than 32 p.c., but increased to 198,042,909 in 1924.

14.—Quantities of Spirits, Malt Liquor, Malt and Tobacco taken out of Bond for Consumption in the fiscal years 1919-1924.

Items.	1919.	1920.	1921.	1922.	1923.	1924.
Spirits.....gal.	2,941,108	3,816,124	2,816,071	730,474	729,678	899,291
Malt liquor.....“	26,024,117	36,863,867	35,509,757	38,404,346	36,789,195	43,717,823
Malt.....lb.	49,184,747	69,975,631	82,210,351	87,561,176	84,922,024	105,446,169
Tobacco, snuff and cigarettes ¹“	24,640,853	30,371,961	26,708,764	27,879,419	27,826,031	28,432,465
Cigars.....No.	221,087,110	270,089,761	214,262,197	181,255,533	183,965,151	198,042,909

¹Tobacco, 20,395,537 lb.; snuff, 776,770 lb.; cigarettes, 2,420,052,731 in 1924.

15.—Consumption per head of Spirits, Wine, Beer and Tobacco, and amount of Excise and Customs Duties per head, in the fiscal years 1919-1924.

(From the Report of the Department of Customs and Excise.)

Items.	1919.	1920.	1921.	1922.	1923.	1924.
Consumption of—						
Spirits.....gal.	0.391	0.624	0.857	0.360	0.219	0.239
Wine.....“	0.025	0.078	0.077	0.037	0.037	0.062
Beer.....“	2.948	4.100	3.954	4.375	4.028	4.790
Tobacco.....lb.	3.109	3.745	3.272	3.434	3.243	3.382
Duty paid on—						
Spirits.....\$	0.942	1.586	2.256	1.859	2.006	2.229
Wine.....\$	0.015	0.056	0.074	0.049	0.057	0.081
Beer.....\$	0.170	0.243	0.292	0.308	0.287	0.372
Tobacco.....\$	2.520	3.541	3.245	3.254	2.883	2.902

5.—Provincial Subsidies.

Tables 16 and 17 show the aggregate amounts of the subsidies and other payments made by the Dominion to the Provincial Governments for each of the years 1920 to 1924 (Table 16), and the totals paid from Confederation to date (Table 17). The provincial subsidies payable by the Dominion Government were originally settled by the British North America Act, 1867 (30 and 31 Vict., c. 3, s. 118), but were revised by the British North America Act, 1907 (7 Edw. VII, c. 11). Under the revised settlement each Provincial Government receives (a) a fixed grant according to population and (b) a grant at the rate of 80 cents per head of the population up to 2,500,000, and at the rate of 60 cents per head of so much of the population as exceeds that number. The Province of British Columbia received an additional grant of \$100,000 per annum for a period of 10 years from 1907.¹ An additional grant of \$100,000 per annum is payable to Prince Edward Island under an Act of 1912 (2 Geo. V, c. 42), and the payments to Manitoba were revised by the Extension of Boundaries (Manitoba) Act (2 Geo. V, c. 32). Other payments to the Provincial Governments by the Dominion Government consist of special grants, as compensation for lands, allowances for buildings, allowances in lieu of debt, etc.

16.—Subsidies and other Payments of Dominion to Provincial Governments, 1920-1924.

Provinces.	1920.	1921.	1922.	1923.	1924.
	\$	\$	\$	\$	\$
Prince Edward Island.....	381,932	381,932	381,932	381,932	381,932
Nova Scotia.....	636,667	636,667	661,866	661,866	661,866
New Brunswick.....	637,976	637,976	666,766	666,766	666,766
Quebec.....	1,969,630	1,969,630	2,256,420	2,256,420	2,256,420
Ontario.....	2,396,379	2,396,379	2,642,612	2,642,612	2,642,612
Manitoba.....	1,470,991	1,470,991	1,470,991	1,466,380	1,485,118
Saskatchewan.....	1,753,075	1,753,075	1,763,883	1,763,883	1,901,069
Alberta.....	1,621,075	1,621,075	1,628,638	1,628,638	1,651,537
British Columbia.....	623,135	623,135	738,816	738,816	738,816
Total.....	11,490,860	11,490,860	12,211,924	12,207,313	12,386,136

17.—Total of Subsidy Allowances from July 1, 1867, to March 31, 1924.

Provinces.	Allowance for Government.	Allowance per head of Population.	Special Grants. ²	Interest on Debt Allowance. ³	Total. ⁴
	\$	\$	\$	\$	\$
Prince Edward Island.....	2,720,000	4,352,818	3,105,505	2,176,160	12,354,483
Nova Scotia.....	5,630,000	19,147,692	826,980	2,654,983	28,259,655
New Brunswick.....	5,060,000	14,626,245	8,280,000	1,132,985	29,099,230
Quebec.....	6,880,000	62,535,169	—	3,922,186	73,337,345
Ontario.....	7,280,000	78,580,578	—	3,461,959	89,322,537
Manitoba.....	4,835,000	11,417,075	10,373,655	9,534,758	36,160,488
Saskatchewan.....	3,296,667	8,386,683	10,125,000	7,702,125	29,510,475
Alberta.....	3,256,666	6,645,945	9,562,500	7,702,125	27,167,236
British Columbia.....	4,230,000	7,573,477	6,300,000	1,554,790	19,658,267
Total.....	43,188,333	213,265,672	48,573,640	39,842,071	344,869,716

¹See Canada Year Book, 1907, pp. xxxiii-iv.²Compensation for lands and allowances for buildings.³Allowance in lieu of debt.

6.—National Debt.

The gross national debt of Canada on Mar. 31, 1914, was \$544,391,369, as against assets of \$208,394,519, leaving a net debt of \$335,996,850. Comparatively small as was this debt, it was a debt incurred almost altogether either for public works of general utility which, like the Intercolonial and Transcontinental railways and the canal system, remained assets, though perhaps not realizable assets of the nation, or was expended as subsidies to enterprises, which, like the Canadian Pacific railway, though not government-owned, assisted greatly in extending the area of settlement as well as the productive and, therefore, the taxable capacity of the country. Broadly speaking, it was a debt incurred for productive purposes. Also, it was mainly held outside the country, the principal of the Dominion funded debt payable on Mar. 31, 1914, in London being \$302,842,485, as against only \$717,453 payable in Canada.

The great changes brought about during the eleven years from 1914 to 1924 in our national debt have been: (1) the enormous increase in net debt from \$335,996,850 to \$2,417,783,275; (2) as having been largely incurred for war purposes, the gross debt is not represented by corresponding assets; (3) the debt is now mainly held in Canada, \$1,895,088,856 being payable in Canada on Mar. 31, 1924; (4) the average rate of interest paid on interest-bearing debt has been considerably increased, the interest-bearing debt on Mar. 31, 1914, being \$416,892,576, with an annual interest charge of \$14,687,797, the average interest rate being thus only 3.52 p.c., while on Mar. 31, 1923, the interest-bearing debt was \$2,653,869,212, with an interest charge of \$136,007,667, the average rate of interest paid thus being 5.125 p.c., reduced by Mar. 31, 1924 to 5.092 p.c. Had it been possible to keep down the rate of interest to its pre-war level, the debt charge would be nearly \$44,000,000 less than it is. Post-war conversions of debt to lower rates of interest are likely to reduce substantially our annual interest payments within the next few years.

Already the refunding in the autumn of 1923 resulted in some saving upon the interest charge of our debt; further, as a result of the refunding operations in the autumn of 1924, there will be a probable saving of interest of approximately \$2,500,000 in the fiscal year 1925-26. The interest-bearing debt, the interest charge upon that debt and the average rate of interest paid, as at the end of the last five fiscal years, are as follows:

	Interest-Bearing Debt.	Interest Charge.	Average Rate of Interest Paid.
	\$	\$	p.c.
Mar. 31, 1920.....	2,703,855,138	138,834,782	5.134
" 1921.....	2,628,342,369	134,845,309	5.130
" 1922.....	2,669,967,110	137,881,774	5.164
" 1923.....	2,653,869,212	136,007,667	5.125
" 1924.....	2,614,147,586	133,198,052	5.092

A summary account of the loans effected since 1914 is appended.

War Loans.—The first Dominion domestic war loan was raised in November, 1915, under authority of chapter 23 of the Statutes of that year (5 Geo. V, c. 23). It originally consisted of \$50,000,000 5 p.c. tax-exempt 10-year gold bonds, issued at 97½ and maturing December 1, 1925. As the issue was heavily over-subscribed (public subscriptions by 24,862 subscribers \$78,729,500, bank subscriptions \$25,000,000) and the extra money was needed, the Government increased the amount of the loan to \$100,000,000. In July, 1915, \$25,000,000 of 1-year and \$20,000,000 of 2-year 5 p.c. notes had been floated in the United States, with the object of stabilizing exchange and of relieving the pressure on London.

In September, 1916, the second Canadian domestic war loan of \$100,000,000 5 p.c. tax-exempt 15-year gold bonds was issued and again over-subscribed (public subscriptions by 34,526 subscribers \$151,444,800, bank subscriptions \$50,000,000). In March of that year, a loan of \$75,000,000 in 5, 10 and 15-year 5 p.c. bonds had been floated in New York.

The third Canadian domestic war loan, composed of \$150,000,000 5 p.c. tax-exempt 20-year gold bonds, issued at 96, was issued in March, 1917, and was again over-subscribed, 40,800 public subscribers applying for \$200,768,000, while the banks subscribed \$60,000,000. In August, 1917, \$100,000,000 of 5 p.c. 2-year notes were issued in New York at 98.

Hitherto the process of raising money had been comparatively easy. The buoyancy of Canadian finance was illustrated by the increasing subscriptions to each successive loan, while the Government could, when needed, obtain additional funds in New York. In April, 1917, however, the United States entered the war. Its gigantic preparations drained enormous sums of money from the New York money market, and made it difficult for other countries to raise money there. Henceforth Canada had in the main to depend on her own people to supply the funds necessary for keeping her steadily increasing forces in the field. Subsequent appeals for war loan subscriptions had to be made to the masses of the people, rather than to the comparatively few wealthy or comfortably-off investors.

The fourth domestic war loan (First Victory Loan), issued in November, 1917, illustrates the foregoing remarks. For the first time subscriptions as low as \$50 were received towards an issue of \$150,000,000 5½ p.c. 5, 10 and 20-year gold bonds, the Minister of Finance reserving the right to allot the whole or any part of the amount subscribed in excess of \$150,000,000. The subscribers numbered 820,035, and the subscriptions totalled \$398,000,000, or about \$50 per head of the population of Canada.

The fifth domestic war loan (Second Victory Loan), of \$300,000,000 5½ p.c. 5 and 15-year tax-exempt gold bonds, was issued at 100 and interest as of date November 1, 1918, and the end of the war, then clearly in sight, stimulated public subscriptions. The applications numbered 1,067,879 and totalled \$660,000,000.

The sixth domestic war loan (Third Victory Loan) was raised at 100 and interest in November, 1919. It consisted of \$300,000,000 taxable 5-year and 15-year 5½ p.c. gold bonds. The subscriptions amounted to \$678,000,000.

A 5½ p.c. renewal loan, aggregating \$114,464,150 and due in 1927 and 1932, was floated in Canada in the autumn of 1922 to pay off the maturing 5-year Victory Loan bonds of 1917. Largely for the same purpose, a \$100,000,000 5 p.c. loan was issued in New York.

In the autumn of 1923, a second renewal loan of \$200,000,000 at 5 p.c. was issued in Canada to pay off the maturing 5-year Victory Loan bonds of 1918.

Refunding operations in 1924, to retire \$107,955,650 5-year Victory bonds, issued in 1919, and to redeem treasury bills held by banks, took the form of a domestic issue of \$50,000,000 4½ p.c. 20-year bonds and \$35,000,000 4 p.c. 2-year notes, and a short term issue in the New York market of \$90,000,000 4 p.c. 1-year treasury notes. An issue of \$24,000,000 in 4 p.c. 1, 2 and 3-year notes (\$8,000,000 of each) was also made in November, 1924.

The general result of these loans has been that in 1924 the great bulk of the Canadian national debt is owing to the Canadian people. At the end of the fiscal year 1923-24, the net funded debt of Canada payable in London was officially stated as \$301,786,046, in New York as \$210,932,000, while the net funded debt payable in Canada amounted to no less than \$1,895,088,856. The largest creditors of the Dominion Government are within the Dominion itself, and, as a consequence, the interest payments made on national debt account outside the country are a relatively small item. Detailed statistics of the national debt as on Mar. 31, 1924, are given in Table 21.

18.—Summary of the Public Debt of Canada, March 31, 1918-1924.

Description.	1918.	1919.	1920.	1921.	1922.	1923.	1924.
	\$	\$	\$	\$	\$	\$	\$
Total debt.....	1,863,335,899	2,676,635,725	3,041,529,587	2,902,482,117	2,902,347,137	2,888,827,237	2,819,610,470
Total assets.....	671,451,836	1,102,104,692	792,660,963 ¹	561,603,133 ¹	480,211,335 ¹	435,050,368 ¹	401,827,195 ¹
Net debt.....	1,191,884,063	1,574,531,033	2,248,868,624	2,340,878,984	2,422,135,802	2,453,776,869	2,417,783,275
Interest on debt.....	47,845,585	77,431,432	107,527,089	139,551,520	135,247,849	137,892,735	136,237,872
Interest on investments.....	4,466,724	7,421,002	17,086,981	24,815,246	21,961,513	16,465,303	11,916,479

¹Active assets only.

19.—Details of the Assets of the Public Debt of Canada, March 31, 1921-1924.

Items.	1921.	1922.	1923.	1924.
	\$	\$	\$	\$
Cash on hand and in banks.....	50,177,300	23,899,777	4,256,042	43,612,756
Specie reserve.....	83,959,873	85,710,325	130,150,335	103,427,038
Advances to banks, provinces, etc.....	138,705,097	103,591,694	75,433,038	92,418,747
Advances to Imperial and Foreign Governments.....	187,408,305	162,766,689	106,540,470	40,071,243
Advances to Soldier Settlement Board.....	69,366,217	78,293,234	83,325,152	86,728,789
Miscellaneous current accounts.....	31,986,341	25,949,616	35,345,331	35,568,622
Total.....	561,603,133	480,211,335	435,050,368	401,827,195

20.—Details of the Gross Liabilities of Canada, March 31, 1921-1924.

Items.	1921.	1922.	1923.	1924.
	\$	\$	\$	\$
Funded debt payable in.....				
London.....	310,334,996 ¹	307,641,659 ¹	304,770,796 ¹	301,786,046 ¹
Canada.....	1,988,494,357 ¹	2,002,215,601 ¹	1,937,031,954 ¹	1,895,088,856 ¹
New York.....	135,874,000	110,934,000	210,933,000	210,932,000
Dominion Notes.....	277,882,885	241,461,426	242,657,765	216,625,004
Savings banks.....	39,160,808	34,666,834	31,791,106	34,211,540
Temporary loans.....	90,835,000	144,535,000	95,432,000	91,520,000
Bank Note circulation redemption fund.....	6,311,498	6,533,999	6,454,150	6,225,878
Trust funds.....	17,642,642	18,647,974	19,621,238	19,327,244
Province accounts.....	9,624,153	9,624,153	9,624,153	9,624,153
Miscellaneous.....	26,321,783	26,086,491	30,511,075	34,269,749
Total.....	2,902,482,117	2,902,347,137	2,888,827,237	2,819,610,470

¹Less Sinking Funds.

21.—Funded Debt Payable in London, New York and Canada, together with Temporary Loans, as at March 31, 1924.

Description.	Amount.	Interest payable thereon.	Date of Maturity.
PAYABLE IN LONDON.			
$4\frac{1}{2}$ per cent loan of 1920-25.....	24,333,333	1,095,000	May 1, 1925 (on or after May 1, 1920, on giving 3 months' notice).
4 " " 1940-60.....	93,926,667	3,757,067	October 1, 1960 (on or after Oct. 1, 1940, on giving 3 months' notice).
$3\frac{1}{2}$ " " 1884.....	23,467,206	821,352	On giving 6 months' notice, or June 1, 1934.
$3\frac{1}{2}$ " " C.P. Ry. land grant.	15,056,007	526,960	July 1, 1938.
$3\frac{1}{2}$ " " 1930-50.....	137,058,841	4,797,059	July 1, 1950 (on or after July 1, 1930, on giving 6 months' notice).
3 " " 1888.....	8,071,230	242,137	July 1, 1938.
3 " " 1892.....	18,250,000	547,500	July 1, 1938.
3 " " 1894.....	10,950,000	328,500	July 1, 1938.
$2\frac{1}{2}$ " " 1897.....	4,888,186	122,205	October 1, 1947.
Gross Total.....	336,001,470	12,237,780	
Less Sinking Funds.....	34,215,424	—	
Net Total.....	301,786,046	—	

Description.	Amount.	Interest payable thereon.	Date of Maturity.
PAYABLE IN NEW YORK.	\$	\$.
5 per cent Bond Loan, 1915-1935.....	874,000	43,700	August 1, 1935.
5 " " Public Service Loan, 1916....	58,000	-	April 1, 1921 (overdue).
5 " " " " " " " " " " " " " "	25,000,000	1,250,000	April 1, 1926.
5 " " " " " " " " " " " " " "	25,000,000	1,250,000	April 1, 1931.
5 " " Bond Loan, 1922-52.....	100,000,000	5,000,000	May 1, 1952.
5½ " " " " " " " " " " " " " "	60,000,000	3,300,000	August 1, 1929..
Total.....	210,932,000	10,843,700	
PAYABLE IN CANADA.			
Province of New Brunswick, 6 per cent Loan Debentures.....	600	-	Overdue.
Province of Canada, 5 per cent Loan Debentures.....	400	-	"
Dominion Stock, issue A, 6 per cent.....	8,000	480	} Various dates.
" " " " " " " " " " " " " "	2,200	77	
" " " " " " " " " " " " " "	40,200	1,407	
" " " " " " " " " " " " " "	48,667	1,703	
" " " " " " " " " " " " " "	60,800	2,128	July 1, 1925.
Debenture Stock, 5 per cent 1919.....	1,000	-	Oct. 1, 1919 (overdue).
" " " " " " " " " " " " " "	25,108,000	1,255,400	-
" " " " " " " " " " " " " "	200	-	June 1, 1919 (overdue).
War Savings Certificates.....	39,021	-	Overdue.
Dominion of Canada Savings Certifi- cates.....	1,607,812	88,430	Various dates.
War Savings and Thrift Stamps.....	629,715	-	Overdue.
Dominion of Canada War Loan, 1915- 1925, 5 per cent.....	42,014,500	2,100,725	Dec. 1, 1925.
Dominion of Canada War Loan, 1916- 1931, 5 per cent.....	52,931,600	2,646,580	Oct. 1, 1931.
Dominion of Canada War Loan, 1917- 1937, 5 per cent.....	90,166,900	4,508,345	March 1, 1937.
Victory Loan 1917, 5½ per cent, due 1922	588,300	-	Dec. 1, 1922 (overdue).
Victory Loan 1917, 5½ per cent, due 1927	63,437,250	3,489,048	Dec. 1, 1927.
Victory Loan 1917, 5½ per cent, due 1937	236,298,850	12,996,437	Dec. 1, 1937.
Victory Loan 1918, 5½ per cent, due 1923	3,013,650	-	Nov. 1, 1923 (overdue).
Victory Loan 1918, 5½ per cent, due 1933	446,663,800	24,566,509	Nov. 1, 1933.
Victory Loan 1919, 5½ per cent, due 1924	107,955,650	5,937,561	Nov. 1, 1924.
Victory Loan 1919, 5½ per cent, due 1934	511,910,650	28,155,086	Nov. 1, 1934.
Renewal Loan 1922, 5½ per cent, due 1927.....	29,068,400	1,598,762	Nov. 1, 1927.
Renewal Loan 1922, 5½ per cent, due 1932.....	85,895,750	4,696,766	Nov. 1, 1932.
Refunding Loan 1923, 5 per cent, due 1928.....	53,000,000	2,650,000	Oct. 15, 1928.
Refunding Loan 1923, 5 per cent, due 1943.....	147,000,000	7,350,000	Oct. 15, 1943.
Gross Total.....	1,897,043,956¹	102,045,444	
Less Sinking Funds.....	1,955,100¹	-	
Net Total.....	1,895,088,856	-	
TEMPORARY LOANS.			
Loan of 1917-19, New York, 5 per cent.....	5,000	-	August 1, 1919.
Treasury Bills, Canada, 5½ per cent.....	4,680,000	-	April 2, 1924.
Treasury Bills, Canada, 5½ per cent.....	41,060,000	-	April 16, 1924.
Treasury Bills, Canada, 5½ per cent.....	19,325,000	-	May 2, 1924.
Treasury Bills, Canada, 5½ per cent.....	26,250,000	-	May 15, 1924.
Total.....	91,320,000	-	-
Debenture Stock, 5 per cent.....	200,000	-	Payable on demand.
Total.....	91,520,000	-	-

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In addition to the direct liabilities of the Government of Canada, there are certain indirect liabilities arising out of the guaranteeing of securities for the railways, both before and after their acquisition by the public. The outstanding securities guaranteed as to principal and interest amounted on March 31, 1924, to \$367,786,714, of which \$58,157,952 was held by the Minister of Finance. The amount guaranteed as to interest only (Grand Trunk Railway Acquisition Guarantees), was at the same date \$216,207,142.

The list of securities guaranteed by the Dominion Government was at March 31, 1924, as follows:

Items.	Principal Amount.	Amount outstanding at March 31, 1924.
	\$	\$
<i>Guaranteed as to Principal and Interest—</i>		
Canadian Northern Ry. Co., 3 per cent deb. stock, due 1953.....	9,359,997	9,359,997
Canadian Northern Ry. Co., 3½ per cent deb. stock, due 1958.....	7,896,590	7,896,588
Canadian Northern Ont. Ry. Co., 3½ per cent deb. stock, due 1961.....	35,770,000	35,770,000
Canadian Northern Alta. Ry. Co., 3½ per cent deb. stock, due 1960.....	3,150,000	3,149,999
Grand Trunk Pacific Ry. Co., 3 per cent bonds, due 1962.....	68,040,000	68,040,000
Canadian Northern Alta. Ry. Co., 3½ per cent deb. stock, due 1962.....	3,570,000	3,569,997
Canadian Northern Ry. Co., 4 per cent bonds, due 1934.....	45,000,000	35,773,333
Grand Trunk Pacific Ry. Co., 4 per cent bonds, due 1962.....	15,940,800	15,940,800
Canadian Northern Ry. Co., 7 per cent bonds, due 1940.....	25,000,000	24,793,000
Grand Trunk Ry. Co., 7 per cent bonds, due 1940.....	25,000,000	24,743,000
Canadian Northern Ry. Co., 5½ per cent notes, due 1924.....	6,000,000	6,000,000
Canadian Northern Ry. Co., 6½ per cent bonds, due 1946.....	25,000,000	25,000,000
Grand Trunk Ry. Co., 6 per cent bonds, due 1936.....	25,000,000	25,000,000
Canadian Northern Ry. Co., 5 per cent notes, due 1925.....	11,000,000	11,000,000
Canadian Northern Ry. Co., 5 per cent serial equipment bonds, 1923-38.....	22,500,000	21,750,000
Canadian Northern Ry. Co., 5 per cent bonds, due 1954.....	50,000,000	50,000,000
Total.....	378,227,387	367,786,714 ¹
<i>Guaranteed as to Interest only—</i>		
<i>Grand Trunk Ry. Acquisition Guarantees—</i>		
Grand Trunk 4 per cent guaranteed stock.....	60,833,333	60,833,333
Grand Trunk 5 per cent perpetual debenture stock.....	20,782,492	20,782,492
Great Western 5 per cent perpetual debenture stock.....	13,252,323	13,252,323
Grand Trunk 4 per cent perpetual debenture stock.....	119,839,014	119,839,014
Northern Ry. of Can., 4 per cent perpetual debenture stock.....	1,499,980	1,499,980
Total.....	216,207,142	216,207,142

¹Of the amount of \$367,786,714 shown by the books of the railways to be outstanding at March 31, 1924, \$58,157,952 was held by the Minister of Finance.

22.—Public Debt of Canada, July 1, 1867, to March 31, 1924.

Fiscal years.	Total debt.	Total assets.	Net debt.	Net debt per capita.	Increase or decrease of debt during the year.	Interest paid on debt.	Interest received from active assets.	Interest paid per capita.
	\$	\$	\$	\$	\$	\$	\$	\$
1867.....	93,046,052	17,317,410	75,728,642	22.73	—	—	—	—
1868.....	96,896,666	21,139,531	75,757,135	22.47	28,493	4,501,568	126,420	1.33
1869.....	112,361,998	36,502,679	75,859,319	22.23	102,184	4,907,014	313,021	1.44
1870.....	115,993,706	37,783,964	78,209,742	22.64	2,350,423	5,047,054	383,956	1.46
1871.....	115,492,683	37,786,165	77,706,518	22.09	—503,225	5,165,304	554,384	1.47
1872.....	122,400,179	40,213,107	82,187,072	22.76	4,480,555	5,257,231	488,042	1.45
1873.....	129,743,432	29,894,970	99,848,462	27.22	17,661,390	5,209,206	396,404	1.42
1874.....	141,163,551	32,838,587	108,324,964	28.32	8,476,502	5,724,436	610,863	1.50
1875.....	151,663,402	35,655,024	116,008,378	29.84	7,683,414	6,590,790	840,887	1.70
1876.....	161,204,688	36,653,174	124,551,514	31.54	8,543,136	6,400,902	798,906	1.62
1877.....	174,675,835	41,440,526	133,235,309	33.20	8,683,795	6,797,227	717,684	1.69
1878.....	174,957,269	34,595,199	140,362,070	34.41	7,126,767	7,048,884	605,774	1.73
1879.....	179,483,871	36,493,684	142,990,187	34.49	2,628,117	7,194,734	592,500	1.74
1880.....	194,634,441	42,182,852	152,451,589	36.17	9,461,402	7,773,869	834,793	1.84
1881.....	199,861,537	44,465,757	155,395,780	35.82	2,944,191	7,594,145	751,513	1.75
1882.....	203,365,252	51,703,601	153,661,651	35.05	—1,734,129	7,740,804	914,009	1.76
1883.....	202,159,104	43,692,390	158,466,714	35.75	4,805,063	7,668,552	1,001,193	1.73
1884.....	242,482,416	60,320,566	182,161,850	40.61	23,695,136	7,700,181	986,668	1.72
1885.....	264,703,607	68,295,915	196,407,692	43.27	14,245,842	9,419,482	1,997,036	2.08
1886.....	273,164,341	50,005,234	223,159,107	48.63	26,751,415 ¹	10,137,009	2,299,079	2.21
1887.....	273,187,626	45,872,851	227,314,775	49.01	4,155,668	9,682,992	990,887	2.09
1888.....	284,513,842	49,982,484	234,531,358	50.03	7,216,583	9,823,313	932,025	2.10
1889.....	287,722,063	50,192,021	237,530,042	50.11	2,998,684	10,148,932	1,305,392	2.14
1890.....	286,112,295	48,579,083	237,533,212	49.56	3,170	9,656,841	1,082,271	2.01
1891.....	289,899,230	52,090,199	237,809,031	49.09	275,819	9,584,137	1,077,228	1.98
1892.....	295,333,274	54,201,840	241,131,434	49.32	3,322,403	9,763,978	1,086,420	2.00
1893.....	300,054,525	58,373,485	241,681,040	48.96	549,606	9,806,888	1,150,167	1.99
1894.....	308,348,023	62,164,994	246,183,029	50.30	4,501,989	10,212,596	1,217,809	2.09
1895.....	318,048,755	64,973,828	253,074,927	50.27	6,891,989	10,466,294	1,336,047	2.08
1896.....	325,717,537	67,220,104	258,497,433	50.82	5,422,506	10,502,430	1,370,001	2.06
1897.....	332,550,131	70,991,535	261,558,596	50.86	3,041,163	10,645,663	1,443,004	2.07
1898.....	338,375,984	74,419,585	263,956,399	50.77	2,417,803	10,516,758	1,513,455	2.02
1899.....	345,160,903	78,887,456	266,273,447	50.63	2,317,048	10,855,112	1,580,448	2.07
1900.....	346,206,980	80,713,173	265,493,807	49.89	—779,640	10,699,645	1,683,051	2.01
1901.....	354,732,433	86,252,429	268,480,004	49.69	2,986,197	10,807,955	1,784,834	2.00
1902.....	366,358,477	94,529,387	271,829,090	49.13	3,349,086	10,975,935	1,892,224	1.98
1903.....	361,344,098	99,737,109	261,606,989	46.11	—10,222,102 ²	11,068,139	2,020,953	1.95
1904.....	364,962,512	104,094,793	260,867,719	44.78	—739,270 ³	11,128,637	2,236,256	1.91
1905.....	377,678,580	111,454,413	266,224,167	44.43	5,356,448	10,630,115	2,105,031	1.77
1906.....	392,269,680	125,226,703	267,042,977	43.27	818,810	10,814,697	2,140,312	1.75
1907.....	379,966,826	116,294,966	263,671,860	41.84	—3,371,117	6,712,771	1,235,746	1.06
1908.....	408,207,158	130,246,298	277,960,860	42.82	14,289,000	10,973,597	1,925,569	1.69
1909.....	478,535,427	154,605,148	323,930,279	48.38	45,969,419	11,604,584	2,256,643	1.73
1910.....	470,663,046	134,394,500	336,268,546	48.61	12,338,267	13,098,161	2,807,465	1.89
1911.....	474,941,487	134,899,435	340,042,052	47.18	3,773,506	12,535,851	1,668,773	1.74
1912.....	503,338,592	168,419,531	339,919,461	46.15	—122,591	12,259,397	1,281,317	1.66
1913.....	483,232,555	168,930,930	314,301,625	41.76	—25,617,836	12,605,882	1,430,511	1.67
1914.....	544,391,369	208,394,519	335,996,850	43.68	21,695,225	12,893,505	1,964,541	1.68
1915.....	700,473,814	251,097,731	449,376,083	57.16	113,379,233	15,736,743	2,980,247	2.00
1916.....	936,987,802	321,831,631	615,156,171	76.55	165,780,088	21,421,585	3,358,210	2.67
1917.....	1,382,003,268	502,816,970	879,186,298	107.48	364,070,127	35,802,567	3,094,012	4.36
1918.....	1,863,335,899	671,451,836 ⁴	1,191,884,063	143.11	312,697,765	47,845,585	4,466,724	5.74
1919.....	2,676,635,725	1,102,104,692 ⁴	1,574,531,033	185.60	382,646,970	77,431,432	7,421,002	9.13
1920.....	3,041,529,587	792,660,963 ⁴	2,248,868,624	260.54	674,337,591	107,527,089	17,056,981	12.46
1921.....	2,902,482,117	561,603,133 ⁴	2,340,878,984	266.36	92,010,360	139,551,520	24,815,246	15.88
1922.....	2,902,347,137	490,211,335 ⁴	2,422,135,802	270.93	81,256,817	135,247,849	21,961,513	15.08
1923.....	2,888,827,237	435,050,368 ⁴	2,453,776,869	270.16	31,641,067	137,892,735	16,465,303	15.08
1924.....	2,819,610,470	401,827,195 ⁴	2,417,783,275	262.04	—35,993,594	136,237,872	11,916,479	14.60

NOTE.—The minus sign (—) denotes a decrease.

¹This amount includes \$10,199,520, for which land was taken from the Canadian Pacific Ry. Co.²This amount included \$3,305,450, caused by the settlement of accounts with Ontario and Quebec.³This amount takes into account \$5,397,503, allowed to Ontario and Quebec, under 47 Vict., c. 6.⁴Active assets only.⁵9 months.

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2.—Provincial Public Finance.

Provincial Governments in Canada are in the position, under section 118 of the British North America Act, 1867 (30 and 31 Vict., c. 3), and the British North America Act, 1907 (7 Edw. VII, c. 11), of having a considerable assured income in subsidies from the Dominion Treasury. Details of these payments are given for recent years in Tables 16 and 17 of this section. In addition, through their retention of ownership of their lands, minerals and other natural resources, the provinces which, by the voluntary action of their previously existing governments, entered Confederation, raise considerable revenues through land sales, sales of timber, mining royalties, leases of water-powers, etc., while the Prairie Provinces receive from the Dominion special grants in lieu of land revenues. Further, under section 92 of the British North America Act, Provincial Legislatures are given authority to impose direct taxation within the province for provincial purposes and to borrow money on the sole credit of the province.

While the *laissez faire* school of political thought was predominant throughout the country, provincial receipts and expenditures were generally very moderate, as may be seen both for individual provinces and for the provinces collectively, from Table 23. From the commencement of the twentieth century, however, the Canadian public, more especially in Ontario and the West, began to demand increased services from the government, particularly along the lines of education, sanitation, and public ownership and operation of public utilities. The performance of these functions necessitated increased revenues, which had in the main to be raised by taxation. Among the chief methods of taxation to be employed has been the taxation of corporations and estates, succession duties showing a considerably increased yield even within the comparatively short period of five years from 1918 to 1922 covered by the statement compiled by the Finance Branch of the Dominion Bureau of Statistics,¹ and published as Table 25. Prominent among the objects of increased expenditure in this same period are education, public buildings, public works and enterprises and charities, hospitals and corrections. The fact that provincial government is cheaper per head in the *laissez faire* eastern provinces is evident from Table 24, which gives the per capita ordinary revenue and expenditure for various provincial fiscal years from 1881 to 1923. This, however, is not to be taken as evidence that the larger services rendered to the public in the western provinces are not worth what is being paid for them.

For the half-century subsequent to Confederation, the provincial accounts, published by each government according to its own system of accounting, were quite incomparable as between the provinces, a fact much regretted by students of provincial public finance. Upon the creation of the Dominion Bureau of Statistics in 1918, its Finance Branch undertook the work of placing the various provincial public accounts on a comparable basis, correlating, for example, the revenues derived from succession duties, taxation of corporations, sales of public lands, royalties on forest, mineral and fisheries products, as well as the expenditures on such services as agriculture, civil government, education and public works. As the result of the Bureau's exhaustive analysis of the provincial public accounts, a summary statement of the ordinary receipts and expenditures of the Provincial Governments appeared for the first time in the 1919 Year Book. In the present issue an analysis is given of the provincial public accounts for the five fiscal years

¹The succession duties collected by the provinces in 1922 amounted in the aggregate to \$11,081,679, as compared with \$1,020,972 as recently as 1904, or a ten-fold increase in 18 years. The aggregate revenue raised by taxation of corporations, etc., increased from \$7,217,548 in 1916 to \$20,434,190 in 1922.

ended from 1918 to 1922. In it the various items of receipts and expenditures have been classified under appropriate headings, and a uniform terminology has been adopted. The result is given in Tables 25 and 26, which present summary statements of the ordinary receipts and expenditures of all the Provincial Governments for each of the five provincial fiscal years from 1918 to 1922. From these statements it is possible to ascertain the amounts received and expended in each year under the respective headings for each province, while Table 27 supplies the same information for the provinces collectively.¹

In the use of these tables it should be borne in mind that the fiscal years in the different provinces do not coincide. In Prince Edward Island, Manitoba and Alberta, the fiscal year ends December 31, in Nova Scotia September 30, in New Brunswick and Ontario October 31, in Quebec June 30, in Saskatchewan April 30 and in British Columbia March 31.

The total ordinary revenue of the nine provinces for their latest fiscal years for which final data are available, ended 1923, was \$117,423,174, as compared with \$116,156,699 in 1922, \$102,030,458 in 1921, \$92,653,023 in 1920, \$76,844,307 in 1919, \$69,345,305 in 1918, \$57,989,984 in 1917, and \$50,015,795 in 1916. The total ordinary expenditure in 1923 was \$131,299,100, as against \$112,874,954 in 1922, \$102,569,515 in 1921, \$88,250,675 in 1920, \$76,403,973 in 1919, \$66,052,909 in 1918, \$60,122,485 in 1917, and \$53,826,219 in 1916. Thus the total ordinary revenue of the provinces shows an increase of 134.7 p.c. in the short space of seven years, while the total ordinary expenditure shows an increase of 143 p.c. in the same period. The main cause of the increasing expenditure has been, of course, the rapid rise during the period in the prices of commodities and labour required for the public service, while the extension of the functions of government has also been a considerable factor.

Considering the individual provinces, the largest revenue for 1923 is that of Ontario, \$34,110,213, Quebec being next with \$21,634,642 and British Columbia third with \$18,758,864. As regards total expenditure for the same year, that of Ontario was highest, \$49,305,439, Quebec second with \$20,190,276 and British Columbia third with \$17,667,330. In 1923, British Columbia raised the largest revenue per head of population, \$34.48, while Prince Edward Island had the lowest, \$7.44.

Provincial Assets and Liabilities.—The asset and liability statements of the provinces vary so greatly in their content that until recently no attempt has been made to publish any collective statement. In some instances natural resources, such as timber, mining, agricultural and school lands unsold, are shown as assets, while in others no account is taken of these. In other cases, provincial government buildings with lands connected therewith, also roads, bridges and public improvements are considered as assets, while other provinces do not include them in their published statements. With a view to presenting the principal items which make up provincial assets and liabilities, the following co-ordinated table (Table 28) has been compiled, in consultation with the various provincial Audit Departments. Other miscellaneous assets of the provinces are briefly enumerated. Indirect liabilities, which are separately given, consist mainly, as shown by the footnotes, of guarantees of bonds and debentures. Generally speaking, both the assets and the liabilities of the provinces in which public ownership of public utilities exists, are proportionately larger than is the case in the other provinces.

¹A report giving details of the finances of Provincial Governments for 1921, with summary statistics for the years from 1916 to 1920, has recently been published. Copies may be obtained on application to the Dominion Bureau of Statistics, Ottawa.

23.—Statement showing the Ordinary Revenues and Expenditures of the Provincial Governments for their respective fiscal years ended 1869-1923.

Years.	Prince Edward Island.		Nova Scotia.		New Brunswick.		Quebec.	
	Receipts.	Expendi- ture. ²	Receipts.	Expendi- ture.	Receipts.	Expendi- ture.	Receipts.	Expendi- ture.
	\$	\$	\$	\$	\$	\$	\$	\$
1869-72 (total 4 yr.)	1,372,064	1,569,447	2,360,891	2,295,304	1,930,397	1,978,949	6,638,866	6,072,289
1873.	484,979 ¹	401,662 ¹	600,196	608,919	588,550	540,486	1,795,749	1,707,356
1874.	403,013	442,767	686,826	676,111	591,465	589,794	1,983,603	1,908,283
1875.	306,597	395,277	616,350	714,803	608,099	679,814	2,036,869	2,060,779
1876.	524,144	353,226	589,637	653,874	634,850	587,330	2,329,868	2,229,025
1877.	326,274	331,632	502,800	588,942	618,113	650,233	2,397,383	2,471,353
1878.	312,684	334,133	645,294	688,003	584,977	640,815	2,018,482	2,577,171
1879.	288,082	313,845	394,205	503,051	526,685	616,132	2,201,215	2,715,549
1880.	269,603	257,309	541,318	506,253	675,285	609,671	2,342,412	2,830,023
1881.	261,380	261,276	476,445	494,582	607,445	598,344	3,191,779	3,566,612
1882.	233,465	257,228	537,667	569,119	643,710	614,236	3,419,371	3,628,229
1883.	228,169	270,477	563,864	541,099	822,889 ³	943,824 ³	2,755,707	3,096,943
1884.	280,271	279,545	586,561	572,768	650,466 ⁴	633,658	2,823,565	3,124,620
1885.	248,222	266,318	613,026	620,700	617,570	584,473	2,926,148	2,936,734
1886.	233,978	304,467	633,145	656,348	634,574	623,593	2,949,568	3,032,607
1887.	241,736	288,052	656,639	664,103	665,819	667,647	2,965,567	3,288,798
1888.	254,209	279,939	712,951	668,400	664,880	640,806	2,738,768	3,365,032
1889.	234,635	263,605	668,774	713,941	651,031	637,051	3,628,544	3,543,619
1890.	224,882	305,799	664,938	710,497	646,079	651,735	3,537,407	3,804,413
1891.	274,047	304,486	661,541	692,538	612,762	680,813	3,457,144	4,005,520
1892.	245,652	259,012	769,976	822,462	652,669	676,483	3,458,404	4,446,460
1893.	217,473	294,201	682,567 ⁵	642,385 ⁶	730,877	711,673	4,373,363	3,907,445
1894.	282,468	280,596	888,213	862,842	619,298 ⁶	661,521 ⁶	4,258,728	4,267,946
1895.	277,314	310,177	835,455	831,230	687,437	684,635	4,221,687	4,189,985
1896.	273,496	287,631	841,160	853,893	698,437	701,452	4,327,910	4,099,707
1897.	272,550	310,752	832,240	853,699	745,203	727,187	3,877,466	4,892,282
1898.	276,183	301,700	855,960	849,330	709,809	727,050	4,176,140	4,415,370
1899.	282,678	276,789	876,828	852,379	764,439	749,644	4,223,579	4,201,023
1900.	282,056	308,494	1,014,123	937,261	758,989	794,477	4,451,578	4,433,386
1901.	309,445	315,326	1,090,230	1,088,927	1,031,267	910,346	4,563,432	4,516,554
1902.	324,670	324,185	1,140,217	1,087,403	826,066	845,637	4,515,170	4,460,677
1903.	318,766	327,662	1,243,581	1,177,331	801,410	816,295	4,699,773	4,596,061
1904.	307,730	356,120	1,194,756	1,161,456	890,653	885,457	4,880,687	4,795,469
1905.	313,445	334,734	1,324,531	1,303,708	865,637	874,420	5,039,001	4,989,906
1906.	258,235 ⁷	264,135 ⁷	1,391,629	1,375,588	887,202	879,066	5,340,167	5,179,817
1907.	350,479	346,081	1,438,167	1,539,169	969,939	960,093	5,270,595	4,767,070
1908.	366,601	377,603	1,783,467	1,624,760	1,056,738	1,042,196	6,016,616	4,980,919
1909.	375,374	366,938	1,632,979	1,653,508	1,259,827	1,255,382	6,082,187	5,539,880
1910.	375,151	382,891	1,592,363	1,725,914	1,324,440	1,317,876	6,571,944	5,627,755
1911.	374,798	398,490	1,635,653	1,790,778	1,347,077	1,403,547	7,032,745	6,424,900
1912.	485,565 ⁸	527,220 ⁸	1,870,056	1,832,075	1,417,722	1,409,049	8,070,109	7,386,680
1913.	506,553	450,112	1,920,565	1,949,784	1,459,000	1,446,963	8,382,737	7,953,985
1914.	525,555	445,396	1,885,458	2,098,893	1,505,229	1,493,773	9,000,377	8,242,368
1915.	470,730	510,345	1,953,302	2,073,672	1,634,079	1,626,634	9,597,926	8,710,516
1916.	508,455	453,151	2,165,338	2,152,773	1,580,419	1,568,340	9,647,984	9,436,697
1917.	496,053	487,113	2,118,620	2,344,009	1,572,814	2,166,904	10,441,114	9,907,672
1918.	514,475	484,416	2,332,634	2,573,797	2,357,909	2,399,062	13,806,392	11,671,830
1919.	501,915	455,409	3,280,313	3,280,282	2,182,420	2,595,937	12,666,352	12,371,131
1920.	740,973	660,774	3,801,016	3,916,848	3,100,892	2,969,323	14,472,651	13,520,740
1921.	769,719	694,042	4,586,840	4,678,146	2,892,905	3,432,512	15,914,521	14,624,088
1922.	748,888	687,241	4,791,208	4,791,998	3,226,727	2,985,877	21,609,396	16,575,977
1923 ⁹ .	654,303	785,629	5,710,780	5,208,211	3,479,733	3,648,273	21,634,642	20,190,276

¹11 months only. ²Includes expenditure on capital account, except for 1900-1904. ³14 months. ⁴Contains \$250,000, proceeds of bonds for funding floating debt. ⁵For 9 months ended September 30. ⁶10 months. ⁷Nine months only, owing to change of fiscal year. ⁸Fifteen months, owing to change of fiscal year. ⁹All figures for 1923 are subject to revision.

23.—Statement showing the Ordinary Revenues and Expenditures of the Provincial Governments for their respective fiscal years ended 1869-1923—con.

Years.	Ontario.		Manitoba.		Saskatchewan.	
	Receipts.	Expenditure.	Receipts.	Expenditure.	Receipts.	Expenditure.
	\$	\$	\$	\$	\$	\$
1869-72 (total 4 yrs.)	11,532,880	8,277,724	—	—	—	—
1873	3,141,298	3,099,634	—	138,658	—	—
1874	3,446,348	3,883,702	24,611 ⁷	61,177 ⁷	—	—
1875	3,156,606	3,617,522	74,534	133,390	—	—
1876	2,589,085	3,152,365	150,010 ⁸	145,248 ⁸	—	—
1877	2,502,449	3,131,998	99,608	92,958	—	—
1878	2,284,656	2,914,864	98,864	107,926	—	—
1879	2,287,951	2,954,712	135,311	151,086	—	—
1880	2,584,152	2,531,166	118,867	185,109	—	—
1881	2,788,747	2,592,800	121,867	226,808	—	—
1882	2,880,450	2,931,825	255,208	232,189	—	—
1883	2,439,941	2,900,035	376,863	386,071	—	—
1884	2,820,555	3,207,890	302,962	501,710	—	—
1885	3,005,921	3,040,139	150,728 ⁷	229,278 ⁷	—	—
1886	3,148,660	2,181,450	485,326	484,002	—	—
1887	3,527,578	3,454,372	506,890	520,190	—	—
1888	3,602,862	3,544,835	841,894 ⁸	758,139 ⁸	—	—
1889	4,464,031	4,578,982	583,795	588,467	—	—
1890	3,434,259	3,907,428	585,709	708,302	—	—
1891	4,138,589	4,158,460	590,484	664,432	—	—
1892	4,662,922	4,068,257	605,288	832,890	—	—
1893	4,091,914	3,907,145	633,116	798,188	—	—
1894	3,453,163	3,839,339	613,094	699,319	—	—
1895	3,585,300	3,758,595	703,172	704,946	—	—
1896	3,490,671	3,703,380	665,353	763,158	—	—
1897	4,139,848	3,767,676	683,706	780,109	—	—
1898	3,710,928	3,864,971	936,604	837,888	—	—
1899	4,103,478	3,717,404	776,234	972,462	—	—
1900	4,192,940	4,003,729	905,331	1,085,405	—	—
1901	4,466,044	4,038,834	1,008,653	988,251	—	—
1902	4,291,083	4,345,004	1,443,256	1,248,128	—	—
1903	5,466,653	4,888,983	1,352,218	1,262,292	—	—
1904	6,128,358	5,267,453	1,486,667	1,271,733	—	—
1905	6,016,176	5,396,017	1,860,900	1,398,431	618,432 ¹	118,602 ¹
1906	7,149,478	6,720,179	2,089,652	1,572,691	1,441,258 ²	1,364,352 ²
1907	8,320,419	7,714,246	2,118,784	1,824,381	—	—
1908	8,602,903	8,557,065	2,891,582	2,534,794	1,844,371 ⁴	2,091,613 ⁴
1909	7,477,921	7,545,040	3,376,893	2,752,774	2,199,984 ⁴	2,654,690 ⁴
1910	8,891,005	8,887,520	3,847,322	3,234,941	2,514,698 ⁴	2,220,866 ⁴
1911	9,370,834	9,916,934	4,454,190	4,002,826	2,699,603 ⁴	2,575,145 ⁴
1912	10,042,001	10,287,992	7,046,675	4,339,540	4,385,831 ⁴	4,255,850 ⁴
1913	11,183,302	10,868,026	5,788,070	5,314,849	4,668,754 ⁴	4,656,800 ⁴
1914	11,121,382	11,819,311	5,512,163	5,638,659	6,372,540 ⁶	5,823,980 ⁶
1915	12,975,732	12,704,362	5,472,955	6,026,596	5,024,936 ⁶	5,368,649 ⁶
1916	13,841,339	12,706,333	5,897,807	6,147,780	4,801,064 ⁶	5,258,756 ⁶
1917	18,269,597	16,518,223	6,292,986	6,860,355	5,631,910 ⁶	5,553,965 ⁶
1918	19,270,122	17,460,404	6,723,013	7,307,727	7,797,153 ⁶	6,828,596 ⁶
1919	20,692,166 ³	21,464,575	8,613,364	8,497,942	8,333,759 ⁶	8,125,203 ⁶
1920	25,981,517 ⁸	25,880,843	9,870,710	10,602,955	9,903,885 ⁶	8,707,833 ⁶
1921	30,411,396 ⁸	28,579,688	9,358,956	10,083,139	11,789,920	12,151,665
1922	39,725,370 ⁸	37,458,395 ⁹	7,940,457	8,381,667	11,801,894	13,322,120
1923 ¹⁰	84,110,213	49,805,439	10,078,730	10,616,568	12,676,763	12,886,544

¹ Four months only. Province created Sept. 1, 1905. ² Fourteen months ended Feb. 28, 1907.

³ Includes capital revenue for lands, which cannot be separated. ⁴ Twelve months ended Feb. 28.

⁵ Fourteen months ended April 30. ⁶ Twelve months ended April 30. ⁷ Six months. ⁸ Eighteen months.

⁹ Includes capital expenditure which cannot be separated. ¹⁰ All figures for 1923 are subject to revision.

23.—Statement showing the Ordinary Revenues and Expenditures of the Provincial Governments for their respective fiscal years ended 1869-1923—concluded.

Years.	Alberta.		British Columbia.		Total for all Provinces.	
	Receipts.	Expenditure.	Receipts.	Expenditure.	Receipts.	Expenditure.
	\$	\$	\$	\$	\$	\$
1869-72 (total 4 yrs.)	-	-	519,036 ⁵	529,775 ⁵	24,363,134	20,723,488
1873	-	-	370,150	372,169	6,960,922	6,868,884
1874	-	-	372,418	583,360	7,508,284	8,145,194
1875	-	-	351,241	614,659	7,150,296	8,216,244
1876	-	-	381,120	728,310	7,198,714	7,903,378
1877	-	-	408,348	685,046	6,914,975	7,952,362
1878	-	-	430,786	514,879	6,375,743	7,777,791
1879	-	-	213,058 ⁶	186,715 ⁶	6,046,487	7,441,090
1880	-	-	390,908	446,575	6,922,545	7,366,106
1881	-	-	397,035	378,779	7,858,698	8,119,701
1882	-	-	405,583	474,428	8,375,454	8,707,254
1883	-	-	425,808	594,102	7,613,241	8,732,551
1884	-	-	503,174	590,629	7,967,554	8,910,820
1885	-	-	600,399	655,438	8,162,014	8,333,080
1886	-	-	514,720	772,211	8,599,965	8,054,678
1887	-	-	537,335	731,307	9,101,564	9,614,469
1888	-	-	598,252	788,955	9,413,816	10,046,106
1889	-	-	698,055	857,545	10,928,865	11,183,210
1890	-	-	835,463	954,021	9,928,737	11,132,195
1891	-	-	959,248	1,032,104	10,693,815	11,628,353
1892	-	-	1,020,002	1,430,920	11,414,913	12,536,664
1893	-	-	1,019,206	1,431,438	11,748,516	11,692,475
1894	-	-	821,660	1,514,405	10,936,624	12,125,968
1895	-	-	896,025	1,906,924	11,206,390	12,386,492
1896	-	-	989,765	1,614,723	11,286,792	12,023,944
1897	-	-	1,383,048	1,569,071	11,934,061	12,900,776
1898	-	-	1,439,623	2,001,032	12,104,247	12,997,341
1899	-	-	1,531,639	2,156,474	12,558,875	12,926,175
1900	-	-	1,544,108	1,831,205	13,149,125	13,393,957
1901	-	-	1,605,920	2,287,821	14,074,991	14,146,059
1902	-	-	1,807,925	2,537,373	14,348,387	14,878,407
1903	-	-	2,044,630	3,393,182	15,927,031	16,461,806
1904	-	-	2,638,260	2,862,794	17,527,111	16,600,482
1905	635,976 ^{1,2}	162,723 ^{1,2}	2,920,462	2,302,418	19,594,560	16,880,959
1906	1,425,059 ²	1,485,914 ²	3,044,442	2,328,126	23,027,122	21,169,868
1907	2,081,828 ²	2,450,375 ²	4,444,594	2,849,480	24,994,805	22,450,895
1908	2,849,650 ²	2,823,831 ²	5,979,055	3,686,350	31,420,983	27,719,131
1909	3,135,727 ²	2,650,441	4,664,501 ³	3,749,171 ³	30,205,393	28,167,824
1910	2,488,406 ²	4,002,394	8,874,742	6,382,993	36,480,071	33,783,150
1911	3,309,156 ²	3,437,088	10,492,892	8,194,803	40,706,948	38,144,511
1912	4,100,113 ²	3,956,562	10,745,709	11,189,024	48,163,781	45,183,992
1913	5,399,905	5,225,584	12,510,215	15,412,322	51,819,101	53,278,425
1914	5,255,276	5,401,595	10,479,259	15,762,912	51,657,239	57,108,888
1915	5,143,590	5,714,032	7,974,496	11,942,667	50,247,746	54,677,473
1916	5,281,695	6,018,894	6,291,694	10,083,505	50,015,795	53,826,219
1917	6,260,106	6,752,504	6,906,784	9,531,740	57,989,984	60,122,485
1918	7,660,762	8,303,808	8,882,845	9,023,269	69,345,305	66,052,909
1919	9,642,739	9,625,749	10,931,279	9,887,745	76,844,307	76,403,973
1920	10,919,776	10,423,356	13,861,603	11,568,003	92,653,023	88,250,675
1921	11,036,937	13,109,304	15,219,264	15,236,931	102,030,458	102,569,515
1922	9,324,890	11,235,192	16,987,869	17,436,487	116,156,699	112,874,954
1923 ⁴	10,419,146	10,990,830	18,768,864	17,667,330	117,423,174	131,299,100

¹ Four months only. Province created Sept. 1, 1905. ² Includes small sums of capital revenue and expenditure which cannot be separated. ³ Nine months only, owing to change in fiscal year. ⁴ All figures for 1923 are subject to revision. ⁵ Six months of 1871 and for the year 1872. ⁶ Six months.

24.—Ordinary Receipts and Expenditures of Provincial Governments per head of Population for their respective fiscal years ended in the census years, 1881-1911, and in each year from 1916 to 1923.

(A) ORDINARY RECEIPTS.

Years.	Prince Edward Island.	Nova Scotia.	New Brun- swick.	Quebec.	Ontario.	Mani- toba.	Saskat- chewan.	Alberta.	British Colum- bia.	Total.
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1881.....	2.53	1.08	1.90	2.35	1.45	1.96	—	—	8.03	1.82
1891.....	2.50	1.47	1.91	2.32	1.96	3.88	—	—	9.77	2.21
1901.....	3.00	2.37	3.12	2.77	2.05	3.95	—	—	8.99	2.62
1911.....	4.00	3.30	3.83	3.50	3.71	9.65	5.48	8.84	26.73	5.65
1916.....	5.59	4.27	4.28	4.43	5.08	10.65	7.41	10.64	13.76	6.23
1917.....	5.49	4.16	4.22	4.72	6.61	11.14	8.42	12.17	14.68	7.10
1918.....	5.72	4.55	6.27	6.14	6.87	11.68	11.28	14.38	18.36	8.34
1919.....	5.61	6.35	5.74	5.54	7.27	14.67	11.69	17.50	21.99	9.08
1920.....	8.32	7.31	8.08	6.23	8.99	16.49	13.47	19.17	27.14	10.75
1921.....	8.69	8.76	7.46	6.74	10.37	15.34	15.56	18.84	29.01	11.63
1922.....	9.47	9.09	8.24	9.01	13.35	12.66	15.17	15.41	31.76	12.99
1923.....	7.44	10.77	8.80	8.87	11.80	15.81	15.78	16.78	34.48	12.98

(B) ORDINARY EXPENDITURES.

Years.	Prince Edward Island.	Nova Scotia.	New Brun- swick.	Quebec.	Ontario.	Mani- toba.	Saskat- chewan.	Alberta.	British Colum- bia.	Total.
1881.....	2.40	1.12	1.87	2.63	1.35	3.64	—	—	7.66	1.88
1891.....	2.77	1.54	2.12	2.75	1.97	4.36	—	—	10.51	2.41
1901.....	3.05	2.37	2.75	2.74	1.85	3.87	—	—	12.80	2.63
1911.....	4.25	3.64	3.99	3.20	3.92	8.68	5.23	9.18	20.87	5.29
1916.....	4.98	4.25	4.25	4.33	4.67	11.10	8.12	12.12	22.05	6.71
1917.....	5.39	4.60	5.82	4.48	5.97	12.15	8.30	13.12	20.26	7.36
1918.....	5.39	5.02	6.38	5.19	6.23	12.69	9.88	15.59	18.65	7.94
1919.....	7.33	6.35	6.83	5.41	7.54	14.48	11.39	17.28	19.89	9.03
1920.....	7.42	7.53	7.73	5.82	8.96	17.72	11.85	18.30	22.65	10.24
1921.....	7.83	8.93	8.85	6.19	9.74	16.49	16.04	22.28	29.05	11.69
1922.....	7.77	9.08	7.62	6.91	12.59	13.37	17.12	18.57	32.58	12.63
1923.....	8.93	9.83	9.23	8.88	16.32	16.65	16.17	17.70	32.48	14.41

NOTE.—As this table is based upon Table 23, those using it should refer to that table for totals and for explanatory notes. All figures for 1923 are subject to revision.

25.—Classified Summary Statement of Ordinary Receipts of Provincial

Sources of Receipts.	Prince Edward Island.				
	1918.	1919.	1920.	1921.	1922.
Subsidies and other Receipts from Dominion Government.....	\$ 372,182	\$ 372,182	\$ 372,182	\$ 372,182	\$ 372,182
Agriculture.....	5,908	1,811	663	1,943	22,062
Lands.....	785	802	1,014	190	206
Mines and Mining.....	—	—	—	—	—
Woods, Forests and Timber.....	—	—	—	—	—
Game and Fisheries.....	17	—	—	—	—
Fines, Penalties and Forfeitures.....	302	35	95	23	326
Fees (other than succession duties).....	9,150	10,923	13,103	13,847	14,060
Succession Duties.....	3,422	3,088	7,936	10,568	20,592
Taxation of Corporations, etc.....	108,543	87,839	245,573	285,825	230,980
Licenses and Permits.....	11,580	27,378	86,024	74,290	76,718
Education.....	—	—	—	—	—
Charities, Hospitals and Corrections.....	8,007	7,130	10,178	7,717	9,170
Interest.....	—	—	—	—	—
Refunds and Repayments.....	41	42	28	2,544	141
Miscellaneous.....	7,189	2,079	4,177	590	2,451
Total Ordinary Receipts.....	514,475¹	501,915¹	740,973	769,719	748,888

Sources of Receipts.	Quebec.				
	1918.	1919.	1920.	1921.	1922.
Subsidies and other Receipts from Dominion Government.....	\$ 2,028,028	\$ 2,028,069	\$ 2,028,163	\$ 2,028,241	\$ 2,315,081
Agriculture.....	23,880	34,647	24,875	28,160	27,240
Lands.....	191,889	485,571	425,468	183,585	132,076
Mines and Mining.....	128,864	278,309	378,480	642,285	205,707
Woods, Forests and Timber.....	1,418,191	2,029,361	2,610,324	3,039,764	2,693,717
Game and Fisheries.....	209,313	231,981	291,719	299,397	336,965
Fines, Penalties and Forfeitures.....	31,045	30,494	57,154	122,861	105,369
Fees (other than succession duties).....	743,810	898,534	1,062,503	1,170,764	1,157,636
Succession Duties.....	4,736,548	1,459,015	1,786,931	2,100,456	3,005,293
Taxation of Corporations, etc.....	1,405,215	1,711,904	1,854,528	1,818,369	2,180,755
Licenses and Permits.....	2,025,554	2,236,444	2,694,242	2,590,695	6,275,337
Education.....	—	—	—	—	—
Charities, Hospitals and Corrections.....	273,772	664,891	450,047	509,506	862,333
Interest.....	179,276	141,249	146,249	221,470	199,164
Refunds and Repayments.....	92,671	109,937	172,514	222,766	147,136
Miscellaneous.....	318,336	326,036	489,454	936,202	965,587
Total Ordinary Receipts.....	13,896,392	12,666,352	11,472,651	15,914,521	21,609,396

Sources of Receipts.	Saskatchewan.				
	1918.	1919.	1920.	1921.	1922.
Subsidies and other Receipts from Dominion Government.....	\$ 2,207,696	\$ 2,307,148	\$ 2,654,840	\$ 3,088,646	\$ 2,950,164
Agriculture.....	15,548	23,378	37,203	29,029	49,989
Lands.....	—	—	—	—	—
Mines and Mining.....	—	40	—	—	—
Woods, Forests and Timber.....	—	—	—	—	—
Game and Fisheries.....	19,777	23,604	28,984	32,417	32,885
Fines, Penalties and Forfeitures.....	67,343	98,182	84,079	125,224	115,975
Fees (other than succession duties).....	1,033,193	962,933	1,071,411	1,177,591	1,020,808
Succession Duties.....	117,335	154,680	278,970	331,370	314,235
Taxation of Corporations, etc.....	1,301,664	2,491,909	3,439,915	3,660,171	3,793,509
Licenses and Permits.....	1,325,106	801,171	746,049	1,027,235	808,904
Education.....	47,058	43,967	28,990	30,584	37,133
Charities, Hospitals and Corrections.....	94,989	82,549	84,362	—	70,598
Interest.....	699,062	539,878	674,693	956,589	1,145,584
Refunds and Repayments.....	367,863	18,315	90,238	334,659	476,351
Miscellaneous.....	500,519	776,005	684,151	996,405	979,759
Total Ordinary Receipts.....	7,797,153	8,333,759	9,903,885	11,789,920	11,801,994

¹ These totals are exclusive of the Motor Vehicle Tax, amounting in 1918 to \$12,651 and in 1919 to \$11,344 net, transferred to the Public Works Department and earmarked for highway improvement.

² These totals include capital revenue to the amount of \$787,394 in 1919, \$903,422 in 1920, \$1,149,919 in 1921 and \$1,218,059 in 1922, received from the Department of Lands and Forests, and not separable into its items.

Governments for their respective fiscal years ended 1918-1922.

Nova Scotia.					New Brunswick.				
1918.	1919.	1920.	1921.	1922.	1918.	1919.	1920.	1921.	1922.
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
636,667	636,667	636,667	636,667	674,466	637,976	637,976	637,976	637,976	681,161
14,509	19,546	21,907	18,255	16,751	179,743	17,071	2,399	2,401	2,902
24,010	42,002	52,878	42,958	41,341	323	51	561	3,886	3,680
656,989	622,420	690,518	635,577	548,318	46,767	36,809	34,062	34,932	45,069
					591,872	685,276	1,385,420	973,067	646,455
2,291	1,420	4,843	8,466	34,514	53,027	76,162	82,135	93,154	95,187
1,404	23,828	6,729	3,081	3,236	29,489	48,040	75,753	89,787	57,162
61,232	82,341	199,783	162,182	228,553	48,361	59,898	78,496	84,219	76,549
117,393	180,962	195,600	158,972	120,740	90,418	79,325	90,610	151,326	241,753
149,894	308,225	349,210	572,818	623,440	310,869	187,754	266,536	283,334	497,744
198,116	292,333	449,076	627,254	838,768	126,593	191,695	290,517	363,275	664,243
59,701	79,658	105,754	159,424	117,861	23,302	21,753	25,891	57,374	54,062
242,846	406,552	505,124	447,554	494,283	62,359	72,194	81,656	82,825	118,335
166,369	158,333	209,866	160,522	336,209	8,064	6,621	23,564	10,077	22,775
312	1,100	274	832	1,336	742	723	770	735	520
5,901	424,926	372,787	951,978	711,392	148,004	61,072	24,546	25,537	19,130
2,332,631	3,280,313	3,891,016	4,586,840	4,791,208	2,357,909	2,182,420	3,109,892	2,892,905	3,226,727

Ontario.					Manitoba.				
1918.	1919.	1920.	1921.	1922.	1918.	1919.	1920.	1921.	1922.
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
2,469,977	2,470,064	2,470,160	2,470,274	2,839,467	1,731,301	1,859,034	2,002,169	1,821,379	1,656,907
179,449	86,139	65,771	87,934	89,836	5,821	7,630	6,234	8,798	3,347
95,366	127,363 ²	148,767 ²	198,409 ²	174,884	166,858	106,838	125,305	91,615	41,692
1,054,066	762,493	1,113,545	499,069	569,211	—	—	—	—	—
1,776,377	1,837,272 ²	2,731,549 ²	3,784,203 ²	4,198,217	—	—	—	—	—
480,009	680,979	791,537	836,156	731,096	25,151	36,933	53,377	80,814	52,619
100,110	111,253	99,748	125,054	427,662	87,147	109,971	139,658	142,508	167,043
631,380	686,365	1,042,908	934,857	1,037,705	320,116	433,441	584,685	471,974	341,328
3,157,567	3,526,592	4,014,468	4,821,811	6,523,245	197,503	193,488	319,556	457,563	168,503
3,990,637	3,919,916	2,666,198	2,632,480	3,319,753	626,777	897,797	991,258	1,315,390	1,454,761
2,070,194	2,851,587	5,304,832	6,318,105	9,709,566	402,028	613,070	770,410	868,160	791,062
149,176	192,510	495,425	652,683	551,901	139,037	229,211	260,953	286,317	190,860
863,270	876,597	1,348,456	1,210,656	1,010,459	159,924	185,262	197,773	223,735	141,332
109,774	289,470	258,624	827,540	886,036	783,312	822,163	762,681	1,153,580	890,774
63,411	52,209 ²	214,034 ²	91,930 ²	139,994	629	7,763	3,866	16,785	24,648
2,079,359	2,221,357	3,215,497	4,920,235	7,516,338	2,077,409	3,110,763	3,652,785	2,420,338	2,015,581
19,270,122	20,692,166 ²	25,981,517 ²	30,411,396 ²	39,725,370	6,723,013	8,613,364	9,870,710	9,358,956	7,940,457

Alberta.					British Columbia.				
1918.	1919.	1920.	1921.	1922.	1918.	1919.	1920.	1921.	1922.
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1,999,772	2,207,646	2,313,104	2,261,601	2,213,609	648,135	623,135	623,135	623,135	709,896
157,140	141,639	112,660	109,723	126,721	50,929	51,060	44,116	45,970	30,981
—	—	—	—	—	484,388	227,674	436,821	587,835	587,148
137,527	213,082	286,499	281,158	472,644	643,622	620,522	550,261	553,373	526,200
—	—	—	—	—	2,079,611	2,582,549	2,455,000	3,280,035	2,828,589
28,757	35,803	35,462	68,957	104,265	106,554	119,590	156,816	172,712	212,067
116,458	130,962	179,342	242,399	212,604	28,966	39,590	41,870	75,181	67,723
792,614	1,005,640	1,094,027	1,037,173	952,174	398,174	423,969	700,922	752,931	874,090
200,072	167,246	267,336	172,598	123,745	241,363	271,777	374,321	342,259	563,573
1,511,855	2,043,027	2,914,982	2,397,461	2,541,684	3,323,170	4,556,937	6,479,499	5,395,272	5,791,564
663,991	1,096,808	1,404,037	1,203,446	1,888,578	356,780	504,245	721,594	1,199,023	2,502,524
35,687	57,602	41,578	139,625	142,476	3,105	4,044	4,993	35,561	72,584
6,638	6,728	10,255	60,947	6,973	60,491	74,614	94,350	100,302	303,727
166,878	118,937	181,218	244,143	181,060	269,493	484,870	738,896	619,555	967,151
425,322	673,633	92,218	184,634	282,058	11,025	25,211	19,769	30,492	39,819
1,418,051	1,743,986	1,987,058	2,683,072	76,299	177,039	321,492	419,240	1,405,628	859,633
7,660,762	9,642,739	10,919,776	11,086,937	9,324,890	8,882,845	10,931,279	13,861,603	15,219,264	16,987,869

NOTE—For combined receipts of all provinces see Table 27.

26.—Classified Summary Statement of Ordinary Expenditures of

Items.	Prince Edward Island				
	1918.	1919.	1920.	1921.	1922.
	\$	\$	\$	\$	\$
Civil Government.....	25,362	29,988	42,677	37,102	33,472
Legislation.....	17,999	24,460	31,729	32,546	29,474
Agriculture.....	16,928	26,066	17,621	26,659	38,181
Lands.....	—	—	—	—	—
Mines and Mining.....	—	—	—	—	—
Forests, Timber and Woods.....	—	—	—	—	—
Game and Fisheries.....	—	—	—	—	—
Administration of Justice, Special Legal Administration and Inquiry.....	26,799	29,015	34,010	33,662	36,130
Conservation of Health and Sanitation.....	2,382	4,304	956	786	536
Public Buildings, Public Works and Enterprises.....	66,612	159,561	130,078	119,834	98,813
Education.....	170,913	183,344	209,478	246,401	273,978
Hospitals.....	91,361	121,385	121,866	120,559	104,364
Correctional Institutions.....	—	—	—	—	—
Charities.....	5,669	5,385	4,961	5,349	5,320
Pensions, Gratuities and Reliefs.....	700	700	992	1,408	700
Recreation and Amusement.....	—	—	—	—	—
Colonization, Immigration and Publicity.....	—	—	—	—	—
Refunds.....	70	400	—	—	915
Interest Payments.....	49,680	50,801	56,498	58,687	59,070
Sinking Funds.....	—	—	—	—	—
Miscellaneous Payments.....	9,941	20,000	9,908	11,049	6,288
Total Ordinary Expenditures.....	484,416	655,499	660,774	694,012	687,241

Items.	Quebec.				
	1918.	1919.	1920.	1921.	1922.
	\$	\$	\$	\$	\$
Civil Government.....	693,377	719,677	807,733	878,775	983,703
Legislation.....	482,469	666,795	585,690	591,107	587,132
Agriculture.....	645,274	602,800	824,200	971,000	1,244,321
Lands.....	260,526	266,756	326,707	373,090	311,109
Mines and Mining.....	16,500	16,500	16,500	16,500	16,500
Forests, Timber and Woods.....	171,909	181,761	272,114	359,900	501,520
Game and Fisheries.....	65,235	86,255	92,500	120,000	125,000
Administration of Justice, Special Legal Administration and Inquiry.....	1,578,850	1,577,815	1,775,321	2,068,457	2,074,687
Conservation of Health and Sanitation.....	69,313	53,386	87,185	117,448	133,171
Public Buildings, Public Works and Enterprises.....	2,127,506	2,303,996	3,032,754	3,047,031	3,330,296
Education.....	1,668,425	1,666,470	1,760,282	1,802,619	1,877,021
Hospitals.....	1,023,556	1,020,784	1,022,446	1,044,145	1,036,059
Correctional Institutions.....	185,000	243,665	226,500	258,271	305,000
Charities.....	72,445	72,945	76,025	77,245	78,770
Pensions, Gratuities and Reliefs.....	184,318	83,690	95,084	86,946	106,642
Recreations and Amusements.....	221,190	264,256	12,181	14,304	10,417
Colonization, Immigration and Publicity.....	52,550	74,586	71,017	71,300	127,013
Refunds.....	10,064	10,063	7,220	16,010	21,677
Interest Payments.....	1,656,539	1,668,563	1,802,760	2,170,330	2,641,479
Sinking Funds.....	167,057	178,211	186,036	198,156	505,156
Miscellaneous Payments.....	319,427	121,167	440,595	341,394	559,304
Total Ordinary Expenditures.....	11,671,830	12,371,121	13,520,740	14,624,088	16,575,977

Provincial Governments for their respective fiscal years ended 1918-1922.

Nova Scotia.					New Brunswick.				
1918.	1919.	1920.	1921.	1922.	1918.	1919.	1920.	1921.	1922.
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
142,019	168,773	215,455	262,195	264,257	99,450	123,173	145,720	146,270	153,095
88,618	104,900	142,865	155,155	123,399	59,650	59,536	117,936	96,292	98,465
42,641	58,461	46,116	72,733	46,745	251,089	84,482	92,912	66,639	61,625
64	94	146	71	96	6,068	6,205	10,295	17,107	9,539
21,271	23,418	33,442	42,129	42,914	920	3,759	998	4,524	2,325
2,600	2,600	3,050	3,050	3,112	35,068	84,432	123,233	215,941	85,772
1,500	1,500	1,500	—	2,166	38,422	47,669	49,654	31,250	28,790
28,333	32,410	36,095	58,243	71,027	40,216	59,531	46,407	53,443	48,313
—	—	3,618	4,128	5,731	—	—	—	15,085	9,122
460,772	871,717	1,134,696	1,123,933	1,089,965	544,871	821,741	908,962	942,644	688,537
522,941	531,104	610,870	776,044	721,528	329,564	326,275	362,067	465,522	450,913
501,962	668,257	751,215	847,568	825,967	208,444	186,059	213,717	210,305	225,842
17,755	21,434	29,601	30,813	34,277	5,700	8,619	29,096	30,583	29,904
7,974	8,350	9,578	10,659	10,464	17,561	10,110	17,873	11,343	11,085
4,963	6,280	10,322	11,914	11,541	4,626	10,346	9,287	15,466	10,373
10,778	12,587	16,430	19,651	19,271	8,306	8,613	8,907	7,695	6,687
15,056	12,224	15,894	13,645	8,359	905	2,607	1,000	—	—
560,987	599,211	616,643	861,564	1,030,239	644,438	628,892	679,264	814,019	886,750
77,448	76,826	103,490	267,358	359,489	31,336	31,335	31,080	78,441	81,965
66,115	80,136	135,822	118,363	123,054	66,647	92,553	121,255	209,943	96,775
2,573,797	3,280,282	3,916,848	4,678,146	4,791,998	2,399,062	2,595,937	2,969,323	3,432,512	2,985,877

Ontario.					Manitoba.				
1918.	1919.	1920.	1921.	1922.	1918.	1919.	1920.	1921.	1922.
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1,066,950	1,261,382	1,550,665	1,858,171	2,093,344	328,119	396,343	479,272	529,115	434,367
359,885	412,136	412,798	455,348	518,300	160,026	148,031	306,360	212,646	315,897
611,525	687,685	741,115	709,366	883,902	87,924	134,166	281,402	206,017	113,439
69,593	72,397	80,830	86,844	97,850	10,835	12,092	19,623	—	—
134,236	123,269	129,019	79,356	112,515	—	—	—	—	—
716,375	867,192	972,978	633,475	740,360	—	—	—	—	—
399,307	477,004	429,593	371,346	283,350	25,684	24,039	18,319	8,821	5,664
746,654	741,812	908,664	1,415,029	1,082,402	465,176	612,786	800,098	793,876	680,968
83,702	105,543	269,641	199,238	313,474	—	10,000	30,000	35,000	30,000
1,040,020	1,416,919	1,406,257	1,925,238	2,161,979	2,351,933	2,761,473	3,031,763	1,246,323	844,475
3,170,625	3,746,865	5,469,679	7,568,815	9,499,905	1,301,124	1,459,710	1,744,713	2,131,678	1,583,898
2,035,990	2,559,138	3,216,009	3,563,570	3,421,939	305,358	377,479	521,738	553,424	413,493
538,461	691,779	604,671	852,302	1,083,742	56,876	70,831	101,714	108,330	80,388
218,804	225,548	323,660	224,170	318,321	243,498	258,942	293,464	342,679	349,830
76,175	12,475	48,635	96,957	1,466,525	112,715	226,732	399,214	505,846	379,844
50,560	79,772	178,470	59,748	55,302	21,129	20,956	25,759	35,398	15,063
41,745	67,661	100,019	337,625	517,728	51,443	37,101	69,595	76,875	52,830
55,878	58,331	187,525	203,082	195,110	2,719	10,891	5,623	29,916	36,220
2,517,379	3,292,387	4,050,115	6,838,334	11,638,501	1,686,325	1,771,457	2,338,949	3,022,144	2,807,417
88,280	—	—	—	—	—	—	—	—	—
3,458,254	4,565,277	4,300,500	1,101,674	973,846	96,843	164,913	135,349	225,051	237,874
17,460,404	21,461,575	25,880,843	28,579,688	37,458,395	7,307,727	8,497,942	10,602,955	10,063,139	8,381,667

¹ Chargeable to Capital Account.

26.—Classified Summary Statement of Ordinary Expenditures of

Items.	Saskatchewan.				
	1918.	1919.	1920.	1921.	1922.
	\$	\$	\$	\$	\$
Civil Government.....	534,145	711,678	789,171	981,581	1,075,286
Legislation.....	344,443	203,975	214,131	218,697	399,054
Agriculture.....	131,876	119,878	208,006	576,101	470,463
Lands.....	1,903	31,565	51,094	40,959	59,487
Mines and Mining.....	—	—	—	—	—
Forests, Timber and Woods.....	—	—	—	—	—
Game and Fisheries.....	—	—	—	—	—
Administration of Justice, Special Legal Adminis- tration and Inquiry.....	10,582	11,304	19,482	19,897	29,147
Conservation of Health and Sanitation.....	988,649	916,183	1,107,208	1,326,496	1,279,402
Public Buildings, Public Works and Enterprises.....	24,416	13,666	27,184	140,190	109,936
Education.....	1,157,980	1,147,221	1,321,738	1,821,014	2,377,943
Hospitals.....	1,052,944	1,192,697	1,434,923	2,443,002	2,880,068
Correctional Institutions.....	526,794	538,073	723,458	771,577	872,346
Charities.....	12,561	14,905	24,831	42,011	35,412
Pensions, Gratuities and Reliefs.....	76,396	96,308	65,484	85,668	117,100
Recreation and Amusement.....	30,353	74,258	52,304	111,378	165,430
Colonization, Immigration and Publicity.....	6,627	6,047	11,497	13,617	17,519
Refunds.....	1,529	3,022	132,196	159,307	25,935
Interest Payments.....	1,096,466	1,222,177	1,337,754	1,620,454	1,829,129
Sinking Funds.....	75,079	192,071	187,660	186,960	63,335
Miscellaneous Payments.....	755,853	1,630,175	999,712	1,592,756	1,515,128
Total Ordinary Expenditures.....	6,828,590	8,125,203	8,707,833	12,151,665	13,322,120

27.—Combined Itemized Summary Statement of Ordinary Receipts and Expenditures

RECEIPTS.

Sources of Receipts.	Total.				
	1918.	1919.	1920.	1921.	1922.
	\$	\$	\$	\$	\$
Subsidies and other Receipts from Dom- inion Government.....	12,731,734	13,141,921	13,738,396	13,940,101	14,418,933
Agriculture.....	632,927	382,921	315,828	332,213	369,829
Lands.....	963,619	990,301 ¹	1,190,814 ²	1,108,478 ²	981,027
Mines and Mining.....	2,667,835	2,533,675	3,053,365	2,646,394	2,367,149
Woods, Forests and Timber.....	5,866,051	7,134,458 ²	9,182,293 ²	11,077,069 ²	11,366,978
Game and Fisheries.....	924,896	1,206,472	1,444,873	1,592,073	1,599,598
Fines, Penalties and Forfeitures.....	462,264	592,265	684,428	926,118	1,147,109
Fees (other than succession duties).....	4,038,030	4,564,044	5,847,838	5,805,538	5,703,503
Succession Duties.....	8,861,621	6,036,123	7,335,728	8,546,923	11,081,679
Taxation of Corporations, etc.....	12,728,624	16,205,308	19,207,699	18,360,120	20,434,190
Licenses and Permits.....	7,174,947	8,614,731	12,466,779	14,271,483	23,615,700
Education.....	457,066	628,745	963,584	1,361,568	1,166,877
Charities, Hospitals and Corrections.....	1,772,296	2,386,517	2,782,201	2,643,542	3,017,210
Interest.....	2,382,228	2,561,521	2,995,791	4,193,476	4,628,753
Refunds and Repayments.....	962,016	888,933 ²	593,711 ²	885,377 ²	1,112,003
Miscellaneous.....	6,731,807	8,987,716	10,849,695	14,339,985	13,146,170
Total Ordinary Receipts.....	69,315,395¹	76,814,307^{1,2}	92,653,023²	102,630,458²	116,156,639

¹ These totals are exclusive of the Motor Vehicle Tax in Prince Edward Island, which amounted in 1918 to \$12,651 and in 1919 to \$11,344 net, and was transferred to the Public Works Department and earmarked for highway improvement.

² These totals include capital revenue in Ontario to the amount of \$787,394 in 1919, \$903,422 in 1920 and \$1,149,919 in 1921, received from the Department of Lands and Forests, and not separable into its items.

Provincial Governments for their respective fiscal years ended 1918-1922—concluded.

Alberta.					British Columbia.				
1918.	1919.	1920.	1921.	1922.	1918.	1919.	1920.	1921.	1922.
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
611,423	722,933	822,660	932,831	945,794	932,418	1,497,939	1,980,580	2,302,857	2,396,717
171,460	175,494	202,993	464,022	250,233	179,958	181,317	163,532	432,526	190,549
798,825	1,096,427	460,767	598,439	731,359	138,620	99,851	103,574	144,983	182,184
40,859	71,500	57,271	43,903	34,735	66,552	160,158	224,855	416,273	372,254
49,009	41,781	51,258	—	—	143,491	136,755	175,655	217,071	123,704
—	—	—	—	—	188,620	143,791	149,723	218,737	352,556
24,745	26,785	30,530	37,995	37,987	64,771	26,994	21,611	38,371	44,927
879,050	1,010,693	1,152,552	1,265,295	1,213,487	519,086	579,912	728,086	876,100	902,170
63,848	125,760	110,538	167,115	254,631	20,808	82,666	46,849	56,361	73,153
1,513,256	2,037,326	2,463,959	2,999,556	1,094,892	1,562,588	1,835,320	2,247,809	3,161,538	3,094,182
1,209,629	1,439,847	1,768,834	2,299,961	2,444,994	1,716,840	1,995,309	2,541,349	2,740,486	3,097,922
308,181	360,333	515,975	628,703	630,293	706,471	1,019,115	1,013,094	1,125,011	1,378,671
59,305	67,090	92,176	94,788	97,205	81,122	99,972	132,964	146,862	179,718
32,063	35,002	37,947	57,364	38,592	78,758	80,805	100,962	114,038	135,556
2,150	39,872	163,284	208,144	310,671	94,712	65,800	54,306	344,748	707,721
—	—	—	—	—	12,004	18,753	20,263	50,485	28,841
16,288	5,660	2,695	7,958	5,968	68,770	76,580	75,847	79,011	79,940
7,531	202,411	11,632	20,253	12,807	29,731	5,935	12,627	13,176	21,364
1,417,299	1,516,842	1,771,846	2,306,246	2,537,743	946,728	1,175,502	1,437,629	2,126,488	3,066,467
152,976	157,501	162,501	212,501	177,494	780,149	—	—	—	—
945,907	392,492	543,938	764,230	416,307	691,072	605,271	336,688	631,809	1,007,891
8,303,808	9,525,749	10,423,356	13,189,301	11,235,192	9,023,269	9,887,745	11,568,003	15,236,931	17,436,487

of all Provincial Governments for their respective fiscal years ended 1918-1922.

EXPENDITURES.

Items.	Total.				
	1918.	1919.	1920.	1921.	1922.
	\$	\$	\$	\$	\$
Civil Government.....	4,433,263	5,631,886	6,833,933	7,928,897	8,380,035
Legislation.....	1,864,508	1,976,644	2,177,944	2,658,339	2,512,503
Agriculture.....	2,724,702	2,909,816	2,775,713	3,371,937	3,772,219
Lands.....	456,400	620,767	770,821	978,247	885,070
Mines and Mining.....	365,427	345,482	406,872	359,580	297,958
Forests, Timber and Woods.....	1,114,572	1,279,776	1,521,098	1,431,103	1,683,320
Game and Fisheries.....	630,246	701,550	663,189	627,680	557,031
Administration of Justice, Special Legal Administration and Inquiry.....	5,272,813	5,560,157	6,588,441	7,890,601	7,388,586
Conservation of Health and Sanitation.....	270,200	395,325	575,971	734,281	928,151
Public Buildings, Public Works and Enter- prises.....	10,825,544	13,355,274	15,678,016	16,387,111	14,781,082
Education.....	11,143,005	12,541,624	15,902,175	20,474,523	22,830,227
Hospitals.....	5,758,117	6,850,623	8,099,518	8,864,862	8,908,974
Correctional Institutions.....	933,329	1,188,242	1,182,856	1,502,564	1,781,465
Charities.....	751,088	804,988	961,200	967,909	1,107,670
Pensions, Gratuities and Reliefs.....	456,658	521,977	841,270	1,377,429	3,159,082
Recreation and Amusement.....	321,099	406,410	267,779	200,992	149,056
Colonization, Immigration and Publicity.....	250,230	282,788	344,110	600,115	809,437
Refunds.....	123,483	305,884	373,777	455,389	322,387
Interest Payments.....	8,058,462	8,633,445	10,041,343	19,818,266	26,496,795
Sinking Funds.....	1,284,045	635,944	670,767	943,416	1,187,439
Miscellaneous Payments.....	9,015,718	11,455,371	11,573,882	4,996,269	4,936,467
Total Ordinary Expenditures.....	66,052,969	76,103,973	88,250,675	102,569,515	112,874,951

28.—Assets and Liabilities of the Provincial Governments

ASSETS.

Items.	Prince Edward Island.	Nova Scotia.
	1922.	1922.
Principal Assets:—	\$	\$
(1) Dominion Government.....	893,389	1,392,589
(2) Investments.....	287,126	—
(3) Deposits.....	—	1,751,632
(4) Cash Balances or in Banks.....	—	—
(5) Utilities, Provincial Ownership.....	—	400,000
(6) Lands.....	—	—
(7) Loans and Advances.....	—	6,789,658
(8) Miscellaneous.....	—	604,351
Total Principal Assets.....	1,180,515	10,938,230
(9) Other Miscellaneous Assets.....	—	—
(10) Natural Resources.....	—	—

LIABILITIES.

Direct Liabilities:—		
(1) Dominion Government.....	—	192,765
(2) Debentures.....	1,033,000	24,608,347
(3) Bonds.....	—	—
(4) Stocks.....	—	—
(5) Treasury Bills.....	—	—
(6) Loans.....	646,687	—
(7) Bank Overdraft and Debit Balances.....	—	509,002
(8) Sinking Funds.....	—	—
(9) Miscellaneous.....	—	11,444
Total Direct Liabilities.....	1,679,687	25,321,558
(10) Indirect Liabilities.....	—	141,241

Included with Debentures.

NOTE.—The following list of items shows the classification of accounts which are included in the above statement:—

ASSETS.

- (1) DOMINION GOVERNMENT, including (a) Provincial Debt Account, (b) Land Account, (c) Housing Act, (d) Common School Fund, (e) School Land Trust Fund, (f) Annual Subsidy, (g) Grant per Capita, (h) Provincial Aid to Highways, (i) Provincial Aid Technical Education Maintenance.
- (2) INVESTMENTS, including (a) Sinking Funds, (b) Inscribed Stock, (c) Victory Bonds, (d) Railway, (e) Debentures, (f) Registered Stock, (g) War Loan—Dominion, (h) Court House Bonds, (i) Farm Loans Association, (j) Land Titles Assurance Fund, (k) Miscellaneous.
- (3) DEPOSITS, including (a) Sinking Funds, (b) Bank Balances, (c) Special Deposits, Trust Accounts, (d) Special Deposits, Bank Liquidation.
- (4) CASH BALANCES or in Banks.
- (5) UTILITIES, PROVINCIAL OWNERSHIP, including (a) Telephones, (b) Grain Elevators, (c) Hydro-Electric Power, (d) Railways.
- (6) LANDS, including (a) Crown Lands, amounts outstanding and interest, (b) Former Indian Reservations, (c) Other Lands, including Soldiers' Land Act, Railway Subsidy Land repurchased and Fairview Works, Fairview, B.C., (d) Timber Dues, Bonus, etc., amounts outstanding, (e) Farm Settlement Board Land.
- (7) LOANS AND ADVANCES, including (a) Co-operative Creameries, (b) Co-operative Elevator Companies, (c) Railway Loans and Interest receivable, (d) Railways, (e) Advances, Trust Accounts, etc., (f) Advances, (g) City of Regina, (h) Education County Loan, (i) Public Utilities, (j) Due from Capital to Current, being amount advanced, (k) Other Loans, (l) Power Commission Temporary Loan.
- (8) MISCELLANEOUS, including (a) Deferred Revenue, (b) Deferred Charges, (c) Royalties (Mining), (d) Railway earnings—accounts receivable, (e) Trust Funds—cash for railway bondholders, (f) Drainage and Judicial Districts, (g) Dvking Assessments Adjustment Act, (h) Secured Accounts, (i) Education School Book Inventory, (j) Taxes uncollected, (k) Accounts receivable and Inventories, (l) Hospitals, accounts receivable, etc., (m) Amounts available for Specific Capital Outlay, (n) Outstanding Revenue, (o) Patriotic Purposes, (p) Miscellaneous.
- (9) OTHER MISCELLANEOUS ASSETS, including (a) Provincial Government Buildings and Sites, (b) Roads and Bridges, (c) Demonstration Farms, (d) Surveys, (e) Appropriation of Revenue, Cash for extinguishment of Government Stocks and Bonds, (f) Public Improvements, (g) Royal Commissions, (h) Patriotic Purposes, (i) Other Assets, (j) Miscellaneous.

at the close of their respective fiscal years ended in 1922.

ASSETS.

New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.
1922.	1922.	1922.	1922.	1922.	1922.	1922.
\$	\$	\$	\$	\$	\$	\$
2,054,299	3,745,681	8,830,670	16,860,105	34,791,797	45,623,557	14,776,334
8,978,685	2,604,539	36,325,857	14,350,170	11,698,086	1,403,433	8,324,675
-	275,135	16,112,677	-	438,672	-	1,435,552
-	2,885,807	-	56,330	-	763,798	1,150,401
2,449,050	3,503,113	116,786,161	18,996,520	11,218,172	20,801,917	-
150,000	-	2,200,000	-	-	-	4,933,416
667,408	722,897	-	635,619	3,992,480	17,974,521	34,043,802
946,035	5,000	2,456,656	13,896,762	381,794	10,124,647	7,023,536
15,245,477	13,742,172	182,712,021	64,795,506	62,521,001	96,691,873	71,687,716
16,455,427	4,862,147	72,131,631	28,475,891	24,940,848	25,899,756	25,586,602
-	-	503,000,000	13,825,283	40,000,000	34,391,397	-

LIABILITIES.

1,636,536	4,061,309	10,750,000	-	-	-	1,878,916
17,773,852	-	-	-	42,920,040	67,373,279	31,125,000
7,111,977	60,000	205,525,000	66,331,121	-	-	-
1,742,603	-	5,561,338	-	7,015,436	1	17,196,936
-	-	13,000,000	1,695,516	670,000	-	-
-	55,604,926	-	1,715,742	-	1,950,000	14,028,343
446,341	-	-	-	487,471	-	-
892,501	-	-	4,400,481	-	1,521,436	-
2,325,347	2,388,826	6,087,657	4,757,961	355,860	5,532,884	7,478,225
31,929,157	62,115,061	240,923,995	78,900,821	51,448,807	76,377,599	71,707,420
1,132,000	3,102,500	46,757,574	32,681,599	-	-	65,531,924

(10) NATURAL RESOURCES, including (a) Pine Timber, (b) Pulpwood, Timber, Ties, Poles, Hardwood, etc., (c) Mining Lands and Profits, (d) Agricultural Lands, (e) Water-powers, (f) Sand, gravel, etc., (g) District of Patricia, area 146,000 sq. miles, Timber, Fisheries Fees and Mining Possibilities, (h) Unsold school lands.

LIABILITIES.

(1) DOMINION GOVERNMENT, including (a) Agricultural Aid, unexpended Balance, (b) Administration Agricultural Aids Act, (c) Housing Act Loan, (d) Dominion Subsidy Paid in Advance, (e) Balance of Account, 1902, (f) Purchase of Property Q.M.O. Railway, (g) Loans, (h) Public Health Aid, unexpended balance.

(2) DEBENTURES, including (a) Provincial, (b) Administration Farms Loans Act.

(3) BONDS, including (a) Provincial, (b) Court House, (c) Government Bonds and Stock, (d) Profit on bond conversion.

(4) STOCKS, including (a) Stock inscribed (London, England), (b) Registered, (c) Stocks.

(5) TREASURY BILLS.

(6) LOANS, including (a) Short Term Special, (b) Loan Account, (c) Due Bank, (d) Temporary Loans, (e) Loans (Funded Debt).

(7) BANK OVERDRAFTS AND DEBIT BALANCES.

(8) SINKING FUNDS, including (a) Replacement reserves, (b) Municipal, (c) Invested.

(9) MISCELLANEOUS, including (a) Certificates (Railway and Annuity), (b) Trust Funds and Deposits, (c) Mortgages (B.C. Building, London, England), (d) Interest, (1) on securities, (2) accrued (not due), (e) Supplementary Revenue Fund, (f) School Grants, (g) Amounts Payable, (h) Licenses paid in advance, (i) Liabilities for Capital Expenditure (including Railways, Bridges, Roads, etc.), (j) Outstanding Warrants, (k) Miscellaneous.

(10) INDIRECT LIABILITIES, including (a) Guarantee of Bonds and Loans in Nova Scotia, (b) Bonds guaranteed by Province of New Brunswick, (c) Debentures and Loans for Railways, Institutions, Schools, etc., in Quebec, (d) Guarantees of Debentures for Toronto University, Niagara Falls Park, Toronto and Hamilton Highway Commission, Towns of Bruce Mines, Cochrane and Matheson, Township of Tisdale, Separate School Board, Town of Timmins and Hydro-Electric Power Commission for Ontario, (e) Principal and Interest guaranteed for C.N.R. Securities, Municipal Debentures and Manitoba Farm Loan Association Securities (in addition interest only has been guaranteed on Municipal Debentures par value \$99,500, also rentals payable to N.R. Ry. Co. for certain railways leased) in Manitoba, (f) Guarantees of Principal and Interest on Securities, Railways, Sewerage and Drainage Board, Dyking Districts, Ore Reduction Co. and Agricultural Credits Commission in Province of British Columbia.

3.—Municipal Public Finance.

The statistics of the rural and urban population of Canada, appearing on pages 119 to 127 of this issue of the Year Book, show that between 1901 and 1921, the urban population of Canada more than doubled, increasing from 2,014,222 to 4,352,442; further, this growth has been greater in the cities, more especially the larger cities, than in the towns and villages. The aggregation of great numbers of people into the cities within a comparatively short space of time has made it necessary for costly public services to be furnished to the newcomers. Problems of water supply, road and bridge building, police and fire protection, sanitation and sewage, transportation, education, public health and recreation have been faced and more or less satisfactorily solved, often at great expense. Some municipalities, indeed, in the period before the war, considered it expedient to provide public services for prospective, as well as for existing population, and later found that the prospects did not become actualities as rapidly as they had expected. The result of the great actual growth and the great expectations of growth was a rapid increase in municipal taxation which has made municipal public finance a very important part of the public finance of Canada, attracting a very considerable amount of attention from theoretical students of public finance, from municipal officials, from bond houses and generally from the urban ratepayer.

Investigators of municipal public finance have, however, found great difficulties in pursuing their studies on account of the incomparability of the statistics collected by Provincial Governments, or the entire absence of such statistics, for as late as 1919, only six provinces compiled and published their municipal statistics. Accordingly, in response to suggestions from the Union of Canadian Municipalities and the Municipal Improvement League of Canada, the Dominion Bureau of Statistics undertook to collect independently through its Finance Branch the statistics for a fixed group of municipalities, of 10,000 population or over, according to schedules and methods of compilation approved by the provinces. The results of the first investigation for the calendar year 1919 were published in summary form on pages 570 to 580 of the 1920 Year Book, as well as in greater detail in a special report. Subsequently other reports appeared of the municipal statistics of urban municipalities of between 3,000 and 10,000 population and municipalities of between 1,000 and 3,000 population. The statistics of these later reports were summarized on pp. 802-805 of the 1922-23 Year Book.

Statistics of Urban Municipalities of 5,000 Population and over.—In the present edition of the Year Book, statistics are presented of 81 urban municipalities of 5,000 population and over reporting to the Bureau for the calendar year 1922.

The total assessed value of taxable property in the 81 cities and towns reporting for 1922 was \$2,993,675,627, being a per capita value of \$1,010.84. The per capita assessed values of taxable property by provinces were as follows: Prince Edward Island \$521.58, Nova Scotia \$572.06, New Brunswick \$464.85, Quebec \$1,067.24, Ontario \$980.93, Manitoba \$1,170.31, Saskatchewan \$1,022.67, Alberta \$1,009.71 and British Columbia \$1,297.80. The 63 cities and towns reporting in the provinces east of Manitoba had an assessed value of taxable property of \$968.03 per capita, as compared with \$1,154.56 per capita for the 18 cities and towns in the provinces west of Ontario.

In connection with receipts, "compulsory taxation," consisting of taxation for general purposes, arrears, school taxes, poll tax, income tax and other special taxation, showed a total for all cities and towns dealt with in 1922 of \$108,500,292, with a per capita revenue from taxation of \$36.64. Taking the provinces separately, taxation receipts for the cities and towns amounted to \$134,279 in Prince Edward Island; \$3,064,307 in Nova Scotia; \$1,803,411 in New Brunswick; \$22,390,225 in Quebec; \$50,078,423 in Ontario; \$9,530,903 in Manitoba; \$4,691,941 in Saskatchewan; \$8,138,798 in Alberta and \$8,668,005 in British Columbia, with per capita revenues respectively of \$11.19 in Prince Edward Island; \$23.57 in Nova Scotia; \$21.68 in New Brunswick; \$26.78 in Quebec; \$41.02 in Ontario; \$40.34 in Manitoba; \$47.50 in Saskatchewan; \$58.50 in Alberta and \$42.18 in British Columbia.

The total ordinary receipts for cities and towns in 1922 amounted to \$185,298,248, while the extraordinary revenue was \$115,714,584, showing an ordinary per capita revenue of \$62.57 and an extraordinary per capita revenue of \$39.07.

A study of the expenditure statement shows that the total ordinary expenditure for the cities and towns making returns in 1922 amounted to \$225,659,986, while the extraordinary expenditure was \$82,073,521, an ordinary per capita expenditure of \$76.19 and an extraordinary of \$27.71.

The total assets of the cities and towns reporting in 1922 amounted to \$948,496,583, or \$320.27 per capita. Of this amount \$241,595,101 represented available assets; \$232,775,633 other revenue-producing assets and \$474,125,849 non revenue-producing and other assets, or a per capita figure of \$81.58 for available, \$78.60 for other revenue-producing and \$160.09 for non revenue-producing and other assets.

The liabilities of the cities and towns in 1922 amounted to \$774,034,572, showing a per capita indebtedness of \$261.36. Of this amount \$665,238,255 represented bonded debt, or a per capita bonded debt of \$224.28.

A summary by provinces of the statistics of principal interest for cities and towns of 5,000 population and over is given in Table 29. Table 30 shows the ordinary and extraordinary receipts in 1922 of each of the 81 municipalities reporting, and Table 31 shows ordinary and extraordinary expenditures in the same year. The assets and liabilities of these municipalities are given as in 1922 in Table 32.

More detailed information regarding the finances of these municipalities and of smaller urban municipalities, between 1,000 and 5,000 population, appears in special reports which may be obtained on application to the Dominion Bureau of Statistics.

29.—Summary by Provinces of Statistics of Principal Interest of Cities

Items.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.
	Number of Cities and Towns			
	1	10	3	17
General Statistics—				
Area in acres.....	850	25,633	32,800	82,848
Population.....	12,000	130,005	83,164	835,928
Value of taxable property (land and buildings)..... \$	6,258,968	74,371,738	38,658,650	892,135,449
Value of exemptions (land and buildings) \$	1,000,000	39,116,600	16,258,700	283,293,150
Incomes assessed for Municipal Income Tax..... \$	1	742,350	20,167,765	57,544
Business assessment..... \$	1	13,817,485	12,075,357	24,400,434
Streets, paved, mileage of.....	4	174	16-41	398-48
Streets, non-permanent, improved, mileage of.....	5	89-85	11	306-77
Streets, unimproved, mileage of.....	10	94	49	527-46
Length of streets lighted.....	19	138	60-4	929-5
Sidewalks, mileage of.....	24	198	111	1,132-2
Sewers, mileage of.....	30	142-55	71-5	823-38
Water mains, mileage of.....	22-41	219-4	124	787-97
Parks and playgrounds, acreage of.....	40	631	74	1,658-73
Estimated value of fire equipment..... \$	15,000	360,045	186,915	1,043,257
Total loss on property by fire..... \$	1	271,870	372,500	4,672,728
Receipts from—				
Taxation..... \$	134,278.83	3,064,307.30	1,803,410.70	22,390,225.27
Licenses and fees..... \$	8,761.90	63,933.32	101,971.18	2,224,441.14
Fines, forfeits and escheats..... \$	2,278.64	18,268.89	14,524.39	186,962.68
Municipally owned public services..... \$	16,335.56	452,958.83	611,939.15	4,588,972.10
Grants and fees for education, libraries, etc..... \$	1	59,795.22	1,000.00	750.41
Interest..... \$	1	28,927.02	6,220.94	1,257,844.47
Sinking funds..... \$	1	18,762.00	157,881.55	1,749,639.21
Total ordinary receipts..... \$	165,824.03	4,354,523.34	2,828,593.36	33,256,644.63
Total extraordinary receipts..... \$	53,118.29	1,067,120.04	504,018.51	37,225,980.06
Grand total receipts..... \$	218,942.32	5,421,643.38	3,332,611.87	70,482,624.69
Expenditures on—				
General government..... \$	9,060.03	171,411.99	172,987.12	1,689,186.31
Police department..... \$	11,491.48	185,772.64	128,818.09	2,025,664.08 ²
Fire department..... \$	7,387.29	225,267.77	142,582.47	2,063,108.00 ²
Inspection of buildings, plumbing, etc.. \$	50.00	9,249.84	100.00	36,652.28 ²
Highways, including administration, salaries and outlays..... \$	21,224.55	578,549.02	452,265.66	5,947,062.61
Health and sanitation..... \$	1,216.23	55,546.18	116,607.87	1,479,828.61
Charities and corrections..... \$	600.00	162,778.82	153,815.71	736,850.55
Education..... \$	32,591.41	1,001,527.22	571,699.14	6,655,479.36
Public service enterprises..... \$	3,789.66	464,114.57	508,577.33	4,584,973.10
Recreations..... \$	2,491.33	18,015.40	32,705.44	456,588.39
Interest..... \$	51,127.42	558,163.16	360,690.59	8,104,700.96
Sinking funds..... \$	22,684.13	198,833.00	293,443.31	3,329,574.51
Total ordinary expenditure..... \$	165,424.50	3,978,861.07	3,209,251.06	38,814,695.39
Total extraordinary expenditure..... \$	53,118.29	119,941.80	148,636.41	30,641,238.39
Grand total expenditure..... \$	218,542.79	4,098,802.87	3,357,887.47	69,455,933.78
Assets—				
Available..... \$	214,404.28	3,467,086.05	2,922,820.05	41,430,668.41
Revenue-producing..... \$	325,000.00	5,806,983.99	6,403,390.30	38,674,532.97
Non revenue-producing..... \$	1,105,183.86	12,324,618.77	9,915,548.75	75,764,565.83
Other..... \$	1	16,642.35	212,194.23	34,806,785.79
Total assets..... \$	1,644,588.14	21,615,331.16	13,453,953.33	190,676,552.70
Liabilities—				
Bonded debt..... \$	1,092,100.00	15,535,210.00	8,887,547.25	153,970,789.69
Floating or current debt..... \$	1	413,132.02	280,805.64	13,269,788.77
All other..... \$	404,119.12	977,564.51	168,951.35	5,266,307.13
Total liabilities..... \$	1,496,219.12	16,925,906.53	9,337,304.24	172,506,885.59

and Towns of 5,000 Population and over for the calendar year 1922.

Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Total.
reporting in each Province.					
32	4	5	3	6	81
116,092	38,447	40,007	66,017	28,873	431,567
1,220,762	236,285	98,795	139,126	205,509	2,961,574
1,197,479,871	276,526,049	101,035,210	140,487,469	266,722,223	2,993,675,627
230,071,850	54,523,501	28,128,155	11,705,354	67,925,415	732,022,725
121,728,623	1	5,603,206	1	1	148,299,488
151,439,048	8,066,498	4,850,407	3,975,306	1	218,624,535
979-78	177-88	43-37	112-2	348-75	2,254-87
860-99	94	239	295-58	167-74	2,069-93
814-81	588	776-44	706	270-9	3,836-61
2,016-23	445	247	437-42	518-95	4,811-50
2,674-74	648-88	318-44	440-41	795-18	6,342-85
1,788-9	338-8	219-9	411-06	415-41	4,241-50
2,085-69	378-24	229-87	423-66	556-69	4,827-93
5,156-83	787-03	1,494-02	1,831-16	2,171-65	13,844-42
1,771,137	579,524	434,612	446,871	453,179	5,290,540
5,388,216	2,181,060	432,482	357,753	899,169	14,575,778
50,078,422.86	9,530,902.86	4,691,940.90	8,138,798.27	8,668,004.63	108,500,291.62
624,017.69	369,780.34	168,011.66	131,233.63	595,242.46	4,287,393.32
619,876.89	83,066.15	28,892.30	47,331.77	221,083.14	1,222,284.85
14,432,778.04	3,019,182.92	2,972,078.81	6,094,949.50	1,408,709.11	33,597,904.02
443,503.57	1,745.71	38,023.85	186,524.30	512,800.12	1,244,143.18
3,037,000.36	95,620.35	75,150.53	1	152,670.64	4,653,434.31
17,790,905.55	20,000.00	1	1	87,504.62	19,824,692.93
94,892,734.73	13,342,597.82	8,578,956.39	15,143,971.56	12,734,402.20	185,298,248.06
64,941,282.36	4,544,220.60	1,442,330.03	4,606,557.25	1,329,956.61	115,714,583.75
159,834,017.09	17,886,818.42	10,021,286.42	19,750,528.81	14,064,358.81	301,012,831.81
4,025,893.54	412,831.82	337,383.13	370,264.60	552,075.23	7,741,093.77
3,163,725.88	577,441.50	225,167.86	351,401.22	754,032.23	7,423,514.98
3,952,962.95	719,364.51	397,733.03	527,889.94	675,853.17	8,712,149.13
218,568.93	48,950.11	10,073.65	27,615.74	21,242.14	372,502.70
13,407,471.07	617,200.55	445,182.73	548,683.05	1,285,940.38	23,303,579.62
6,185,724.03	561,716.79	306,208.53	429,830.04	434,787.63	9,571,465.91
4,262,340.98	862,960.72	372,245.23	811,513.34	903,768.27	8,266,873.62
21,868,463.76	3,538,527.42	2,039,620.52	2,718,075.12	2,520,611.97	40,946,595.92
29,123,827.40	3,015,678.85	2,285,918.22	6,041,036.65	846,364.62	46,874,280.40
1,866,663.11	298,130.21	101,727.29	146,370.83	210,915.19	3,114,507.19
12,292,417.75	1,182,050.49	1,411,478.61	2,506,499.78	3,086,916.74	29,554,045.30
21,767,497.09	269,320.56	576,803.92	798,388.21	1,573,758.06	28,830,302.79
128,215,563.47	13,410,772.47	8,671,852.61	15,917,031.93	13,276,533.38	225,659,985.88
42,795,464.20	2,871,918.78	1,082,020.11	3,427,646.10	933,536.74	82,073,520.82
171,011,027.67	16,282,691.25	9,753,872.72	19,344,678.03	14,210,070.12	307,733,506.70
86,455,368.63	30,806,815.05	17,205,320.65	31,271,567.72	27,821,050.69	241,595,101.23
106,720,047.43	23,737,054.15	14,889,829.56	21,070,746.26	15,148,048.26	232,775,632.92
181,097,868.28	37,493,460.82	20,754,854.27	35,428,698.66	39,830,820.17	407,715,619.41
23,829,727.64	1,402,808.24	2,025,356.28	1	4,116,715.16	66,410,229.59
398,103,011.88	93,440,138.26	54,875,360.76	87,771,012.64	86,916,634.28	948,496,583.15
268,797,215.52	59,602,002.00	32,335,969.74	61,235,843.13	63,781,577.36	665,238,254.69
12,643,636.66	3,348,287.61	2,855,356.65	8,181,609.36	5,571,642.24	46,564,258.95
31,371,179.94	9,587,682.65	5,300,572.63	6,264,620.36	2,891,060.62	62,232,058.31
312,812,032.12	72,537,972.26	40,491,899.02	75,682,072.85	72,244,280.22	771,034,571.95

¹ Not available. ² The town of Cap de la Madeleine in Quebec gives total only of \$5,594.90 for Police and Fire Departments and Inspection of Buildings, etc. ³ In Ontario the town of Ford City shows expenditures for Fire Department and Inspection of Buildings, etc., under Police Department.

30.—Receipts, ordinary and extraordinary, of Cities and Towns of 5,000 population and over for the calendar year 1922.

Name of City or Town.	Assessed Value of Taxable Property.	Receipts.				
		From Taxation.	From Public Services. ⁴	Total Ordinary.	Total Extraordinary.	Grand Total.
Prince Edward Island—	\$	\$	\$	\$	\$	\$
Charlottetown.....	6,258,968	134,279	16,336	165,824	53,118	218,942
Nova Scotia—						
Halifax.....	48,268,650	2,026,123	2,400	2,645,711	690,000	3,335,711
New Glasgow.....	4,787,680	191,688	40,028	300,896	22,999	323,895
Amherst.....	4,844,430 ¹	200,835	37,686	252,146	59,516	311,662
Dartmouth.....	4,097,450	124,560	209,961	372,770	82,920	455,690
Sydney Mines.....	2,459,398	84,033	11,808	112,312	23,985	136,297
Truro.....	3,408,950	153,831	105,937	285,521	33,223	318,744
North Sydney.....	1,994,200	84,371	16,156	119,173	62,813	181,986
New Waterford.....	1,419,100	69,456	s	92,916	43,917	136,833
Springhill.....	884,455	60,304	10,767	79,619	14,252	93,871
Stellarton.....	1,607,425	69,105	18,217	93,461	33,494	126,955
New Brunswick—						
St. John.....	29,339,450	1,481,888	529,720	2,303,662	174,214	2,477,876
Fredericton.....	5,372,700	227,880	31,789	375,287	141,499	516,786
Campbellton.....	3,946,500	93,643	50,430	149,645	188,305	337,950
Quebec—						
Montreal.....	709,324,469	19,345,918	3,088,632	27,655,805	30,962,451	58,618,256
Thul.....	17,507,820	193,561	99,455	443,010	696,761	1,141,771
Three Rivers.....	22,371,125	345,860	151,639	834,069	1,649,694	2,483,763
Sherbrooke.....	25,742,715	451,458	445,660	1,162,726	1,973,732	3,136,458
Westmount.....	49,079,100	791,558	250,389	1,079,549	608,376	1,687,925
Outremont.....	28,026,992	524,684	s	594,223	468,188	1,062,411
St. Hyacinthe.....	6,829,588 ²	128,280	86,946	230,536	21,357	251,893
Joliette.....	4,176,615	63,868	104,373	189,453	55,945	245,398
Lévis.....	5,023,000	87,315	73,231	176,768	68,353	245,121
Sorel.....	3,213,650	73,333	37,134	138,929	62,825	201,754
Granby.....	3,601,065	50,633	18,565	79,450	30,305	109,755
Rivière-du-Loup.....	3,342,780	50,827	73,542	155,180	254,725	409,905
Thetford Mines.....	3,840,250	53,980	31,295	98,007	94,450	192,547
Cap de la Madeleine.....	3,024,977	41,877	19,026	66,978	11,700	78,678
La Tuque.....	3,028,631	49,386	18,214	92,988	s	92,988
St. Jérôme.....	2,545,007	83,185	52,902	164,494	173,600	338,094
Magog.....	1,457,665	54,472	37,919	92,391	93,518	185,909
Ontario—						
Toronto.....	615,290,743	24,980,557	8,287,932	56,133,840	28,633,977	84,767,817
Hamilton.....	113,589,090	4,744,966	1,481,129	8,556,618	4,550,909	13,147,527
Ottawa.....	109,920,751	3,666,184	992,774	5,300,800	2,750,582	8,051,382
London.....	51,908,673	2,316,944	284,934	3,950,420	6,497,060	10,447,480
Windsor.....	48,496,950	2,077,760	32,477	2,342,079	4,939,435	7,281,514
Brantford.....	21,523,700	1,118,110	520,807	1,899,063	733,657	2,572,720
Kitchener.....	14,856,692	1,024,522	12,613	1,153,652	4,473,158	5,626,811
Sault Ste. Marie.....	13,920,345 ³	679,275	239,559	1,061,680	746,818	1,808,498
Kingston.....	13,476,245	612,592	390,010	1,104,550	275,032	1,379,582
Peterborough.....	16,932,370	618,849	85,400	733,184	309,647	1,042,831
St. Catharines.....	16,277,035	858,166	1,931	1,278,447	906,791	2,185,238
Fort William.....	29,056,997	1,075,726	589,763	2,240,000	45,094	2,285,094
Stratford.....	12,363,650	534,235	9,559	676,453	1,145,676	1,822,129
Port Arthur.....	18,385,205	896,737	175,607	1,525,697	422,962	1,948,659
Niagara Falls.....	12,145,565	626,826	256,756	963,777	1,421,201	2,384,978
Sarnia.....	13,026,601	629,132	271,340	968,424	417,443	1,385,867
Chatham.....	11,375,260	454,385	10,394	521,017	284,036	805,053
Galt.....	8,285,330	473,499	225,766	805,582	503,249	1,308,801
Woodstock.....	9,320,115	286,058	17,430	348,833	1,048,667	1,397,500
Sudbury.....	4,760,050	254,326	147,120	452,241	287,147	739,888
Pembroke.....	3,694,335	186,848	16,572	260,302	395,295	655,597
Cornwall.....	2,549,060	151,168	22,856	191,316	129,995	321,311
Lindsay.....	3,810,085	219,238	6,559	240,285	240,324	480,609
Walkerville.....	8,274,389	423,733	19,537	467,909	1,368,258	1,836,167
Midland.....	4,049,339	131,038	942	184,578	93,536	278,114
Barrie.....	3,415,595	168,631	s	191,761	43,293	235,054
Collingwood.....	3,916,365	177,084	939	183,152	49,541	232,693
Kenora.....	3,151,660	161,727	136,467	310,940	2,569	313,509
Ford City.....	5,659,396	127,244	s	244,903	1,436,768	1,731,671
Preston.....	2,875,450	142,419	110,237	302,623	302,173	566,796
Dundas.....	2,521,230	122,058	71,890	249,007	340,011	589,018
Hawkesbury.....	1,715,600	91,853	12,828	107,631	96,979	204,610

¹ Figures taken from 1920 report. ² Including \$1,528,900, church property paying special tax of 2 mills, and \$41,860, farms paying 7½ mills for general purposes taxation. ³ There is a specific assessment on land and buildings of \$6,654,100 on which a tax of \$12,500 is paid yearly. ⁴ Includes Street Railways, Waterworks System, Electric Light and Power, Markets, etc. ⁵ None.

30.—Receipts, ordinary and extraordinary, of Cities and Towns of 5,000 population and over for the calendar year 1922—concluded

Name of City or Town.	Assessed Value of Taxable Property.	Receipts.				
		From Taxation.	From Public Services. ³	Total Ordinary.	Total Extraordinary.	Grand Total.
	\$	\$	\$	\$	\$	\$
Manitoba—						
Winnipeg.....	240,451,700	8,087,301	2,592,293	11,287,391	1,374,388	12,661,779
Brandon.....	14,101,660	644,352	234,446	994,598	672,200	1,666,798
St. Boniface.....	14,964,220	557,340	49,449	650,685	2,302,632	2,953,317
Portage la Prairie.....	7,008,469	241,911	142,996	409,923	195,000	604,923
Saskatchewan—						
Regina.....	38,122,770	1,939,872	1,183,088	3,515,787	550,149	4,065,936
Saskatoon.....	29,753,445	1,407,505	994,166	2,684,336	513,921	3,198,257
Moose Jaw.....	20,563,410	974,537	527,744	1,702,415	250,161	1,952,576
Prince Albert.....	7,954,475	183,635	158,157	369,039	4	369,039
Yorkton.....	4,641,110	186,392	108,924	307,378	128,100	435,478
Alberta—						
Calgary.....	65,679,312	3,613,757	2,296,827	6,030,562	4	6,030,562
Edmonton.....	63,369,090	3,965,188	3,383,344	8,097,827	4,506,557	12,604,384
Medicine Hat.....	11,439,067 ²	559,853	414,779	1,015,582	100,000	1,115,582
British Columbia—						
Vancouver.....	172,085,850	5,550,582	549,042	7,577,382	4	7,577,382
Victoria.....	65,842,167	2,012,812	305,214	2,926,399	293,760	3,220,159
New Westminster.....	9,586,550	501,509	190,098	970,274	753,932	1,724,206
Nanaimo.....	5,461,233	164,720	40,326	324,498	165,431	489,929
Prince Rupert.....	8,461,091	275,647	185,722	494,662	23,210	517,872
Kamloops.....	5,285,332	162,734	138,308	441,186	93,625	534,811

¹ In addition there is \$1,601,890 taxable for school purposes only. ² In addition \$622,270, land, and \$5,000, buildings, are assessed for school purposes only. ³ Includes Street Railways, Waterworks System, Electric Light and Power, Markets, etc. ⁴ None.

31.—Expenditures, ordinary and extraordinary, of Cities and Towns of 5,000 population and over for the calendar year 1922.

Name of City or Town.	Expenditure.						
	General Government.	Protection to Person and Property. ²	Highways.	Health and Sanitation.	Education.	Total Ordinary.	Grand Total all Expenditures.
	\$	\$	\$	\$	\$	\$	\$
Prince Edward Island—							
Charlottetown.....	9,060	18,929	21,225	1,216	32,591	165,425	218,543
Nova Scotia—							
Halifax.....	73,610	318,089	326,829	39,960	592,666	1,913,443	1,913,443
New Glasgow.....	6,352	17,957	56,999	2,674	39,683	323,395	323,895
Amherst.....	24,181	12,583	19,588	666	48,300	260,737	311,847
Dartmouth.....	18,808	14,918	83,498	1,425	95,419	578,834	578,834
Sydney Mines.....	5,817	10,434	12,350	1,312	42,591	141,444	141,444
Truro.....	14,014	12,240	34,114	6,861	80,748	289,505	289,505
North Sydney.....	6,476	9,888	16,465	1,385	13,777	163,258	190,294
New Waterford.....	14,779	14,263	8,792	826	27,845	113,623	136,833
Springhill.....	4,364	5,937	8,171	337	27,606	93,871	93,871
Stellarton.....	3,011	3,982	11,743	100	32,893	100,750	118,835
New Brunswick—							
St. John.....	122,710	226,604	344,128	87,125	440,899	2,486,662	2,515,617
Fredericton.....	18,746	26,284	49,742	7,164	91,800	395,705	513,396
Campbellton.....	31,530	18,612	58,395	22,320	39,000	326,884	328,874
Quebec—							
Montreal.....	1,128,958	3,617,315	4,658,174	1,174,307	6,273,206	31,258,665	57,864,653
Hull.....	27,360	83,144	41,644	76,830	1	561,259	1,050,759
Three Rivers.....	72,870	83,416	87,251	21,466	10,000	793,309	2,483,763
Sherbrooke.....	132,040	66,956	497,225	17,658	222,227	2,816,613	3,159,121
Westmount.....	125,330	103,505	191,270	74,562	12,955	1,156,098	1,592,707
Outremont.....	66,692	46,507	168,996	95,758	113,548	757,600	1,050,426
St. Hyacinthe.....	14,494	20,051	42,805	2,914	419	208,931	248,981

¹ Under control of the School Board. ² Includes Police and Fire Department and inspection of buildings, etc.

31.—Expenditures, ordinary and extraordinary, of Cities and Towns of 5,000 population and over for the calendar year 1922—concluded.

Name of City or Town.	Expenditure.						
	General Government.	Protection to Person and Property. ²	Highways.	Health and Sanitation.	Education.	Total Ordinary.	Grand Total all Expenditures.
	\$	\$	\$	\$	\$	\$	\$
Quebec—concluded.							
Joliette.....	9,327	18,917	15,516	3,639	1	201,397	247,497
Lévis.....	10,320	18,825	71,339	607	1	189,190	246,773
Sorel.....	9,476	17,150	11,938	1,060	1	122,797	201,578
Granby.....	8,282	7,498	39,382	2,939	1	88,409	107,309
Rivière-du-Loup.....	13,184	17,777	79,864	1,324	1	236,522	392,447
Thetford Mines.....	9,369	11,228	20,324	1	1	80,610	191,598
Cap de la Madeleine.....	15,510	5,595	4,443	1	1	66,764	113,451
La Tuque.....	16,009	7,565	7,125	3,616	290	92,988	92,988
St. Jérôme.....	18,110	3,386	3,549	3	1,661	101,919	232,773
Magog.....	11,855	2,185	6,218	3,144	21,174	81,565	179,110
Ontario—							
Toronto.....	2,068,477	4,389,534	6,510,211	2,264,160	9,446,368	79,228,631	96,280,703
Hamilton.....	296,487	576,261	1,109,508	972,645	1,751,583	10,505,415	13,215,691
Ottawa.....	626,788	542,783	624,965	896,076	2,309,182	7,191,401	7,813,899
London.....	129,592	250,260	342,840	685,919	1,323,252	5,141,739	10,447,480
Windsor.....	70,133	228,296	201,798	20,674	1,344,095	2,423,750	7,245,276
Brantford.....	51,220	143,859	208,794	256,697	376,346	2,250,119	2,573,111
Kitchener.....	45,448	74,490	816,907	94,032	311,107	1,832,765	5,475,486
Sault Ste. Marie.....	70,747	92,487	49,073	69,125	533,414	1,330,833	1,805,875
Kingston.....	85,538	57,182	226,807	44,928	214,452	1,195,758	1,358,197
Peterborough.....	32,146	67,377	98,472	63,829	239,904	991,320	1,042,832
St. Catharines.....	42,193	90,960	223,183	41,319	550,610	1,456,460	2,224,208
Fort William.....	46,014	139,054	240,688	23,266	364,825	2,246,123	2,272,175
Stratford.....	29,127	65,638	367,191	5,215	238,052	1,040,706	1,821,831
Port Arthur.....	30,087	115,714	84,945	32,056	199,364	1,270,084	1,948,659
Niagara Falls.....	108,915	67,904	179,327	311,157	172,499	1,276,770	2,462,971
Sarnia.....	26,412	75,662	96,718	37,104	365,087	1,106,631	1,456,072
Chatham.....	47,049	35,734	84,519	10,703	152,703	436,726	802,326
Galt.....	26,596	26,813	262,787	180,760	140,989	1,258,557	1,308,801
Woodstock.....	17,777	35,441	41,137	17,986	85,740	309,286	1,363,048
Sudbury.....	9,233	27,921	67,833	12,788	195,144	500,737	771,203
Pembroke.....	19,677	15,834	193,167	13,149	81,007	423,984	656,828
Cornwall.....	6,627	10,845	71,188	3,315	48,099	274,180	314,259
Lindsay.....	13,899	12,176	65,292	27,790	126,846	345,494	470,416
Walkerville.....	33,337	54,473	95,601	27,557	730,557	1,162,583	1,762,879
Midland.....	5,699	13,532	21,973	3,018	64,700	160,220	277,849
Barrie.....	6,905	14,685	24,333	1,725	62,852	178,403	234,990
Collingwood.....	9,912	15,368	11,796	5,031	68,801	168,578	237,087
Kenora.....	12,509	22,742	13,252	2,196	55,436	290,879	290,879
Ford City.....	21,726	44,672	958,215	7,612	174,690	1,470,179	1,731,576
Preston.....	8,143	9,245	47,951	7,630	46,888	274,660	550,939
Dundas.....	9,741	13,807	59,640	45,845	48,950	356,031	504,587
Hawkesbury.....	14,740	4,530	7,359	417	24,922	116,560	198,894
Manitoba—							
Winnipeg.....	323,775	1,199,076	532,470	503,432	3,019,865	11,187,301	11,187,301
Brandon.....	26,533	48,481	23,296	22,962	203,645	926,562	1,183,198
St. Boniface.....	48,490	64,364	44,232	29,648	215,000	927,509	3,037,792
Portage la Prairie.....	14,034	33,836	17,203	5,675	100,018	369,400	559,400
Saskatchewan—							
Regina.....	112,701	249,941	204,920	136,097	770,843	3,348,074	4,131,096
Saskatoon.....	105,729	185,276	115,185	78,193	765,312	2,878,994	2,878,994
Moose Jaw.....	70,372	148,946	60,711	71,361	409,626	1,772,417	1,949,785
Prince Albert.....	32,598	36,725	32,904	12,509	2,410	357,707	366,983
Yorkton.....	15,983	12,086	31,462	8,049	91,429	134,661	427,015
Alberta—							
Calgary.....	137,958	432,374	270,332	135,281	1,210,000	6,067,778	6,067,778
Edmonton.....	177,156	221,888	241,194	265,365	1,272,210	8,813,044	12,231,784
Medicine Hat.....	55,151	52,645	37,158	29,184	235,866	1,036,210	1,045,117
British Columbia—							
Vancouver.....	323,742	1,030,166	842,020	236,361	1,587,427	7,733,013	7,733,013
Victoria.....	127,913	260,504	251,580	104,175	484,995	3,052,375	3,231,219
New Westminster.....	28,313	71,362	72,350	15,882	218,093	1,205,076	1,714,980
Nanaimo.....	14,044	19,521	29,727	5,117	67,573	349,434	489,831
Prince Rupert.....	44,611	42,091	57,101	16,818	81,138	483,254	483,254
Kamloops.....	13,453	27,484	33,162	56,435	81,387	453,382	557,774

¹ Under control of the School Board. ² Includes Police and Fire Department and inspection of buildings, etc. ³ None.

32.—Assets and Liabilities of Cities and Towns of 5,000 population and over for the calendar year 1922.

Name of City or Town.	Total available assets.	Total revenue-producing assets.	Total non revenue-producing assets.	Total assets. ¹	Liabilities.		
					Bonded debt.	Floating or current debt.	Total liabilities. ²
	\$	\$	\$	\$	\$	\$	\$
Prince Edward Island—							
Charlottetown.....	214,404	325,000	1,105,184	1,644,588	1,092,100	*	1,496,219
Nova Scotia—							
Halifax.....	1,774,733	3,433,231	8,511,911	13,719,875	10,309,000	145,000	10,999,000
New Glasgow.....	372,299	500,000	735,150	1,607,449	1,010,450	23,170	1,033,620
Amherst.....	394,250	337,066	682,753	1,414,268	1,023,500	15,000	1,038,868
Dartmouth.....	173,522	554,856	920,800	1,649,178	815,500	87,513	1,237,179
Sydney Mines.....	172,482	96,770	301,792	571,043	379,100	48,468	436,127
Truro.....	261,908	436,275	587,743	1,302,368	958,660	21,829	980,489
North Sydney.....	133,958	171,952	193,074	498,984	453,000	44,761	498,984
New Waterford.....	51,522	*	84,950	136,472	65,000	2,500	109,748
Springhill.....	57,848	180,150	86,000	323,998	223,500	12,710	236,210
Stellarton.....	74,564	96,685	220,446	391,696	297,500	12,181	309,681
New Brunswick—							
St. John.....	2,524,334	5,725,912	2,812,328	11,167,343	7,373,077	174,214	7,603,053
Fredericton.....	254,672	269,521	695,341	1,325,406	821,470	78,286	1,006,455
Campbellton.....	143,815	407,957	407,879	961,204	693,000	28,305	727,796
Quebec—							
Montreal.....	32,516,500	27,356,676	58,166,961	151,402,676	125,875,351	9,973,905	135,849,256
Hull.....	721,699	1,329,802	1,063,853	3,204,005	2,653,025	412,300	3,065,325
Three Rivers.....	1,365,339	1,242,496	2,908,349	5,731,767	4,752,500	364,064	5,731,767
Sherbrooke.....	2,185,955	3,245,258	1,854,966	7,852,689	5,243,000	826,163	6,069,163
Westmount.....	2,090,316	857,340	4,876,255	7,939,959	4,877,667	98,460	7,939,959
Outremont.....	911,230	*	3,290,456	4,304,739	3,600,000	31,812	4,304,739
St. Hyacinthe.....	228,781	604,958	907,266	1,749,659	581,244	940,539	1,626,339
Joliette.....	175,679	521,887	417,317	1,120,580	719,500	101,720	846,694
Lévis.....	142,562	676,675	308,665	1,127,901	1,030,594	39,167	1,106,445
Sorel.....	82,266	355,500	347,500	833,355	696,000	255,102	973,679
Granby.....	477,366	*	*	477,366	265,000	19,000	303,226
Rivière-du-Loup.....	120,002	956,535	326,646	1,427,115	1,308,855	40,000	1,476,550
Thetford Mines.....	19,623	307,463	301,157	628,243	387,000	15,963	477,119
Cap de la Madeleine.....	76,477	352,220	81,577	510,275	418,700	44,888	473,758
La Tuque.....	86,168	156,722	380,940	848,830	576,300	54,043	855,343
St. Jérôme.....	202,234	432,864	313,601	991,729	615,179	33,500	991,729
Magog.....	28,472	278,137	219,056	525,666	370,875	19,163	415,797
Ontario—							
Toronto.....	43,743,459	60,665,651	100,306,338	209,166,964	145,089,220	*	154,783,159
Hamilton.....	4,971,149	7,308,857	14,542,845	34,768,554	18,150,233	1,369,330	27,826,924
Ottawa.....	11,724,436	6,059,632	11,586,985	29,371,053	21,966,129	922,335	26,904,099
London.....	2,681,177	5,079,017	5,162,439	16,337,279	12,745,179	387,263	13,952,473
Windsor.....	642,461	2,495,347	9,588,475	13,642,447	8,281,333	624,000	9,104,687
Brantford.....	1,678,920	1,461,320	2,807,864	5,948,103	5,051,377	447,345	5,498,722
Kitchener.....	634,382	2,082,297	1,523,183	5,265,808	2,943,572	735,839	3,831,657
Sault Ste. Marie.....	1,334,598	899,562	3,266,650	5,500,810	4,034,023	357,979	4,392,002
Kingston.....	569,431	1,683,423	376,129	2,628,983	2,295,922	*	2,407,399
Peterborough.....	1,350,831	1,771,266	1,950,837	5,159,891	3,765,990	127,351	3,996,143
St. Catharines.....	1,761,081	1,450,072	4,026,489	8,200,709	5,026,075	460,759	7,434,726
Fort William.....	3,823,362	3,353,721	3,940,091	12,455,607	8,201,522	3,363,807	12,269,784
Stratford.....	1,541,406	1,133,520	1,203,159	4,512,448	2,540,799	496,734	3,037,533
Port Arthur.....	4,746,072	3,087,360	4,568,002	12,401,434	7,655,362	87,996	12,401,434
Niagara Falls.....	210,776	938,200	2,837,224	3,986,199	2,268,201	753,786	3,022,487
Sarnia.....	888,919	1,113,430	1,168,882	3,407,417	2,297,768	345,013	2,751,687
Chatham.....	162,253	538,500	1,007,767	1,708,520	1,238,517	*	1,238,517
Galt.....	876,537	949,091	2,187,446	4,454,059	2,860,388	494,884	3,409,304
Woodstock.....	534,225	569,165	843,800	1,947,190	1,449,842	4,500	1,454,342
Sudbury.....	430,539	432,416	1,302,183	2,165,138	1,221,364	66,673	1,437,616
Pembroke.....	241,454	368,621	631,058	1,342,970	601,416	316,460	928,426
Cornwall.....	140,370	195,800	241,265	580,654	287,985	1,600	357,565
Lindsay.....	172,721	238,363	307,362	1,562,500	844,054	153,799	997,853
Walkerville.....	162,767	771,648	2,043,299	3,178,743	1,471,961	155,250	2,712,647
Midland.....	26,046	318,780	431,475	812,449	623,146	23,593	646,739
Barrie.....	44,687	328,803	569,381	942,871	419,003	30,688	449,691
Collingwood.....	68,628	148,262	206,851	433,168	401,256	6,326	411,735
Kenora.....	671,657	506,294	293,892	1,471,844	1,101,183	97,822	1,241,889
Ford City.....	395,166	63,000	956,921	1,786,579	1,441,083	433,384	1,874,467
Preston.....	97,343	419,851	180,826	894,452	606,523	52,368	710,027
Dundas.....	78,429	376,973	733,628	1,462,030	513,528	307,939	842,767
Hawkesbury.....	50,087	11,804	305,123	606,138	457,262	18,813	483,533

¹ Includes other assets.² Includes other liabilities.

* None.

32.—Assets and Liabilities of Cities and Towns of 5,000 population and over for the calendar year 1922—concluded.

Name of City or Town.	Total available assets.	Total revenue-producing assets.	Total non revenue-producing assets.	Total assets. ¹	Liabilities.		
					Bonded debt.	Floating or current debt.	Total liabilities. ²
	\$	\$	\$	\$	\$	\$	\$
Manitoba—							
Winnipeg.....	24,770,397	22,107,801	31,460,037	79,499,341	50,167,771	1,714,004	60,849,286
Brandon.....	2,347,026	950,272	2,083,294	5,380,592	3,542,385	337,851	3,888,264
St. Boniface.....	3,191,093	678,978	3,950,130	8,061,906	4,857,070	1,296,432	6,640,647
Portage la Prairie..	498,299			498,299	1,034,776		1,059,776
Saskatchewan—							
Regina.....	6,586,971	6,010,799	11,330,344	23,928,114	11,926,156	440,641	13,277,722
Saskatoon.....	5,014,529	4,293,338	5,252,667	14,560,534	9,716,216	884,450	13,629,796
Moose Jaw.....	4,712,858	2,354,519	2,699,528	9,766,905	6,265,318	1,124,001	7,397,007
Prince Albert.....	531,935	1,546,041	1,007,773	5,111,105	3,672,155	239,734	4,996,445
Yorkton.....	359,029	685,133	464,542	1,508,703	756,125	166,530	1,190,929
Alberta—							
Calgary.....	10,991,206	10,110,486	15,466,345	36,568,037	24,422,433	1,308,453	28,983,391
Edmonton.....	17,860,312	8,599,419	17,083,919	43,543,651	32,195,655	6,074,128	41,281,899
Medicine Hat.....	2,420,049	2,360,842	2,878,435	7,659,325	4,617,755	799,028	5,416,783
British Columbia—							
Vancouver.....	16,861,752	5,114,296	26,401,040	50,536,827	35,103,317	4,744,788	40,979,080
Victoria.....	6,658,490	5,127,296	9,243,513	21,323,488	18,231,394	645,992	18,985,682
New Westminster..	2,395,457	2,496,613	1,753,661	8,124,968	6,291,273	124,131	7,075,474
Nanaimo.....	534,169	417,570	545,296	1,497,035	1,002,925	20,000	1,049,860
Prince Rupert.....	946,699	1,109,823	1,379,456	3,552,363	1,937,668		2,461,517
Kamloops.....	424,484	882,450	502,824	1,881,953	1,215,000	36,731	1,692,669

¹ Includes other assets.

² Includes other liabilities.

³ None.

⁴ Not given.

4.—National Wealth and Income.

1.—National Wealth.

There are several methods of computing national wealth, *i.e.*, the aggregate value of property within the nation, apart from undeveloped natural resources. Perhaps the most familiar of these methods is that of working back to capital values through income tax returns, but this can be applied only in countries where incomes are thoroughly appraised. A second method is that of estimation from probate returns, the value of the estates of deceased persons being regarded as representative. A third is that of a complete census, based upon a canvass of the individual. In the accompanying tables a fourth method, namely, the so-called "inventory" method, is employed; it consists in totalling the amounts known from various sources to be invested in agriculture, manufactures, dwellings, etc.

It must be understood that statistics of this character are suggestive and indicative rather than strictly accurate. The concept of wealth is distinctly intangible, and there are numerous elements of uncertainty in a calculation of this nature. It should be pointed out that Tables 33 to 35 cover the year 1921 (the latest year for which the statistics are available), and that in 1921 the money values of commodities were still above normal. Estimates for subsequent years will doubtless on this account show considerable changes in several of the items. The present survey, which includes for the first time the provincial distribution of Canadian wealth, places the estimated aggregate of the tangible wealth of the Dominion in 1921 at \$22,195,000,000.

Aggregate and per capita wealth of the Provinces, 1921.—As regards the provincial distribution of wealth, Ontario ranked first, with estimated aggregate wealth amounting to \$7,353,000,000, or 33.1 p.c. of the total, and Quebec second, with estimated wealth of \$5,542,000,000, or 25 p.c. of the whole. Saskatchewan followed at a considerable distance, with estimated wealth of \$2,846,000,000, or 12.8 p.c. of the total for the Dominion.

While Ontario led in absolute wealth, the western provinces came first in per capita wealth; Saskatchewan held first rank with a per capita wealth of \$3,757, Alberta second with \$3,317, and Manitoba third with \$2,705. These figures may be compared with \$2,507 and \$2,347, the per capita wealth of Ontario and Quebec respectively. Further details are furnished in Tables 33 to 35.

33.—Provincial Distribution of the National Wealth of Canada, with percentage and per capita Analyses, 1921.

Provinces.	Estimated Wealth.	Percentage Distribu- tion of Wealth.	Population.	Percentage Distribu- tion of Population.	Wealth per Capita.
	\$	p.c.	No.	p.c.	\$
Prince Edward Island.....	119,912,060	0.5	88,615	1.01	1,353
Nova Scotia.....	752,697,986	3.4	523,837	5.96	1,437
New Brunswick.....	597,596,369	2.7	387,876	4.41	1,541
Quebec.....	5,541,819,967	25.0	2,361,199	26.87	2,347
Ontario.....	7,353,397,816	33.1	2,933,662	33.38	2,507
Manitoba.....	1,650,495,868	7.4	610,118	6.94	2,705
Saskatchewan.....	2,845,642,985	12.8	757,510	8.62	3,757
Alberta.....	1,950,973,479	8.8	588,454	6.70	3,317
British Columbia.....	1,365,896,120	6.2	524,582	5.97	2,604
Yukon.....	16,869,792	0.1	4,157	0.14	4,058
Canada.....	22,195,302,443	100.0	8,788,483	100.0	2,525

¹Includes 7,988 persons in the Northwest Territories and 485 persons engaged in the Royal Canadian Navy.

Wealth of Canada by Items, 1921.—The capital invested in the farms of the country, including implements and live stock, as determined by the last decennial census, was the largest item in our national wealth, aggregating \$6,587,000,000, or 29.68 p.c. of the whole. The value of agricultural production in 1921, \$1,396,000,000, was also included to cover the average stocks of agricultural goods in the possession of farmers and traders and the amount invested in the preparation for the new crop. Thus the agricultural wealth of Canada totalled \$7,983,000,000, nearly 36 p.c. of the wealth of Canada.

The second largest element in the national wealth was urban real property. This includes the assessed valuations of taxed and exempted property, to which was added one-third to provide for under-valuation by assessors and for roads, bridges and sewers. The estimated value, as based on returns for 1921 received from municipalities, was \$5,752,000,000, or 25.91 p.c. of the total wealth of the Dominion.

The wealth invested in steam railways, computed from the cost of road and equipment, and distributed by provinces on the basis of mileage, constituted the next largest item, amounting to \$2,159,000,000, or 9.73 p.c. of the total.

Other important items include stocks in process, raw material and finished products of manufacturing establishments, to which was added 100 p.c., as an estimate of the value of manufactured goods in the hands of dealers, the whole amounting to \$1,363,000,000, or 6.14 p.c., the tangible value of the forests, amounting to \$1,198,000,000, or 5.4 p.c., and household furnishings and other personal property, including automobiles, amounting to \$1,144,000,000, or 5.15 p.c.

On the basis of the 1921 population of 8,788,483, the per capita wealth invested in farms and equipment was \$749, in urban real property \$654, in steam railways \$246, in the forests \$136 and in household furnishings, clothing and motors \$130. The per capita wealth of all kinds was \$2,525. Further details of the items included are presented in Table 34.

34.—An Estimate of the National Wealth of Canada, with percentage and per capita Distribution of Component Items, 1921.

Classification of Wealth.	Aggregate Amount.	Percentage of Total.	Average Amount per head of Population.
	\$	p.c.	\$
Farm values (land, buildings, implements, machinery and live stock, census 1921).....	6,586,648,126	29.68	749
Agricultural products in the possession of farmers and traders, 1921.....	1,396,223,000	6.29	159
Total agricultural wealth, 1921.....	7,982,871,126	35.97	908
Mines (capital employed, 1921).....	559,514,154	2.52	64
Forests (estimated value of accessible raw materials, pulpwood and capital invested in woods operations).....	1,197,660,000	5.40	136
Fisheries (capital invested in boats, gear, etc. in primary operations, 1921).....	25,648,650	.12	3
Central electric stations (capital invested, 1921).....	239,675,661	1.08	27
Manufactures (machinery and tools, 1921).....	610,068,624	2.75	70
Manufactures (materials on hand, stocks in process; estimate for amount in dealers hands, 1921).....	1,362,535,764	6.14	155
Steam railways (investment in road and equipment).....	2,159,298,000	9.73	246
Electric railways (investment in road and equipment).....	186,519,439	.84	21
Canals (amount expended on construction to March 31, 1922)....	141,425,373	.64	16
Telephones (cost of property and equipment).....	158,678,229	.71	18
Urban real property (assessed valuations and exempted property and estimated for under-valuation by assessors, and for roads, sewers etc.).....	5,751,505,257	25.91	654
Shipping (estimated from 1918 census and distributed according to tonnage owned).....	100,000,000	.45	11
Imported merchandise in store, being one-half imports during year 1921.....	373,902,166	1.68	43
Household furnishings, clothing, carriages, motors, etc., distributed according to wealth and population.....	1,144,000,000	5.15	130
Specie held by Government and chartered banks and estimated for public holdings.....	202,000,000	.91	23
Total Estimated Wealth, 1921.....	22,195,362,443	100.00	2,525

35.—Estimated National Wealth of Canada, by Provinces and Chief Component Items, 1921.

(NOTE.—For a fuller description of the various items, see Table 34.)

Items.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
Farm values.....	58,977,962	136,841,573	131,825,675	1,096,787,710	1,691,686,034
Agricultural products.....	21,431,000	44,234,000	48,458,000	325,291,000	441,418,000
Total agricultural wealth.....	80,408,962	181,075,573	180,283,675	1,422,078,710	2,133,104,034
Mines.....	—	82,283,644	2,985,382	81,494,918	188,769,764
Forests.....	—	58,150,000	100,840,000	364,600,000	194,100,000
Fisheries.....	779,816	8,764,864	3,316,479	1,795,404	3,352,410
Central electric stations.....	435,294	3,987,037	2,523,413	69,673,905	109,708,766
Manufactures—					
Machinery and tools.....	416,367	23,466,288	23,678,211	178,830,643	317,313,962
Materials on hand, stocks in process; estimate for amount in dealers' hands.....	862,658	32,923,886	52,840,474	411,195,058	736,152,436
Steam railways.....	15,197,000	79,320,000	106,430,000	272,180,000	594,820,000
Electric railways.....	—	10,628,013	2,898,584	55,710,238	75,398,989
Canals.....	—	648,547	—	33,179,064	107,597,762
Telephones.....	599,220	6,371,040	2,914,054	66,689,329	7,480,225
Urban real property.....	8,931,108	177,891,231	52,977,267	2,091,052,019	2,232,795,204
Shipping.....	781,100	12,538,000	3,304,600	36,751,100	25,078,100
Imported merchandise in store.....	500,535	9,449,863	13,604,230	107,189,579	183,926,164
Household furnishings, clothing, carriages, motors, etc.....	9,000,000	53,100,000	40,100,000	295,100,000	376,400,000
Specie held by Government, chartered banks and public ¹	2,000,000	12,100,000	8,900,000	54,300,000	67,400,000
Total estimated wealth, 1921.....	119,912,060	752,697,956	597,596,369	5,541,819,967	7,353,397,816
Percentage.....	0.5	3.4	2.7	25.0	33.1
Percentage distribution of Canadian population by provinces and territories, 1921.....	1.01	5.96	4.41	26.87	33.38

Items.	Manitoba.	Saskatch- ewan.	Alberta.	British Columbia.	Yukon.	Canada.
Farm values.....	650,638,045	1,650,069,196	968,437,018	201,384,913	—	6,586,648,126
Agricultural products.....	100,016,000	253,712,000	124,512,000	37,151,000	—	1,396,232,000
Total agricultural wealth.....	750,654,045	1,903,781,196	1,092,949,018	238,535,913	—	7,982,871,126
Mines.....	5,343,706	4,761,177	73,603,005	109,030,712	11,241,846	559,514,154
Forests.....	20,560,000	46,585,000	70,475,000	342,350,000	—	1,197,660,000
Fisheries.....	695,414	37,096	134,523	6,769,327	3,317	25,648,650
Central electric stations.....	14,873,661	6,720,585	8,531,270	22,775,600	446,130	239,675,661
Manufactures—						
Machinery and tools.....	14,687,848	4,099,873	7,363,086	40,190,889	21,457	610,068,624
Materials on hand, stocks in process; estimate for amount in dealers' hands.....	35,108,300	9,873,336	15,662,382	67,841,758	75,476	1,362,535,764
Steam railways.....	250,640,000	342,590,000	255,840,000	239,110,000	3,171,000	2,159,298,000
Electric railways.....	13,307,741	3,579,386	6,279,366	18,717,122	—	186,519,439
Canals.....	—	—	—	—	—	141,425,373
Telephones.....	17,520,122	25,476,719	20,026,415	11,407,239	193,866	158,678,229
Urban real property.....	410,820,516	349,803,449	290,247,235	136,987,228	—	5,751,505,257
Shipping.....	784,200	36,500	—	20,660,000	66,400	100,000,000
Imported merchandise in store.....	18,300,315	5,098,668	5,962,179	29,720,333	150,300	373,902,166
Household furnishings, clothing, carriages, motors, etc.....	83,200,000	125,800,000	90,400,000	69,700,000	1,200,000	1,144,000,000
Specie held by Government, chartered banks and public ¹	14,000,000	17,400,000	13,500,000	12,100,000	300,000	202,000,000
Total estimated wealth, 1921.....	1,650,495,868	2,845,642,985	1,950,973,479	1,365,896,121	16,869,792	22,195,302,443
Percentage.....	7.4	12.8	8.8	6.2	0.1	100.0
Percentage distribution of Canadian population by provinces and territories, 1921.....	6.94	8.62	6.70	5.97	0.05	100.0

¹The specie holdings are here distributed among the several provinces according to population.

2.—National Income.

The national income of Canada is necessarily less than its national production, a total for which is suggested in the general survey of production on pages 181-185 of this volume. If, as pointed out there, there is no reason to suppose that those whose activities are not connected with the production of "form-utilities" are less "productive" in the broad sense of the term than others, the total value of the production of 1922 must have been not less than \$4,400,000,000.

In order to arrive at the figure of national income, however, certain heavy deductions from the above amount must be made—deductions especially connected with the maintenance of the industrial equipment of the country—providing not only for depreciation but for obsolescence and replacement by new and improved apparatus of production. Altogether, the charges under this head may have been not less than \$400,000,000. This would leave the 1922 income of the Canadian people at somewhere in the neighbourhood of \$4,000,000,000.

Incomes assessed for Income War Tax in Canada.—In those countries of the world where an income tax has been established for a considerable period of time, the figures of the assessed income have been generally accepted as furnishing a guide both to the amount and to the distribution by classes of the total national income. Estimates of the national income, based upon income tax statistics, have been published, for example, in Great Britain and in the United States.

In Canada, the income tax is a newer thing than in either of the above-mentioned countries; also, in a newer country than either, incomes are to a greater degree received in kind. Both of these considerations render it improbable that so large a percentage of the total national income of Canada is brought under the notice of the income tax authorities as in Great Britain or the United States. Nevertheless, the data collected by the Income Tax Branch¹ of the Department of Finance, in the course of its administration of the income war tax, are significant both with regard to the total income assessed and with regard to the distribution of that income among various classes of the population, as well as by size of income groups.

In Canada, in the fiscal year ended March 31, 1921, 3,696 corporations and 190,561 individuals paid income tax on incomes aggregating \$912,410,429; in the following year 8,286 corporations and 290,584 individuals paid income tax on \$1,462,529,170; in the fiscal year ended 1923, 6,010 corporations and 281,182 individuals paid income tax on \$1,092,407,925, and in the latest fiscal year, 1923-24, 5,569 corporations and 239,036 individuals paid income tax on incomes aggregating \$1,108,027,871. It may be added that in the first nine months of the fiscal year 1924-25, the amount collected in income tax was \$53,519,492, as compared with \$50,805,166 in the same period of the preceding year—an increase of \$2,714,326. As this figure represents the great bulk of the collections for each year, it may be taken as evidence that either the national income of the country increased, or that a larger percentage of it came under the observation of the income tax authorities. The increased yield is the more remarkable because substantial concessions were made in respect of children, the exemption for each child having been increased in 1924 from \$300 to \$500.

¹ Transferred to Customs and Excise Department by chapter 37 of the Statutes of 1924.

36.—Amount of Income Assessed for the Purposes of the Income War Tax, by Provinces, for the fiscal years ended March 31, 1922-1924.

Provinces.	Amount of Income Assessed.		
	1922.	1923.	1924.
	\$	\$	\$
Prince Edward Island.....	3,707,988	2,618,325	2,301,305
Nova Scotia.....	51,057,049	35,671,544	33,785,631
New Brunswick.....	35,238,694	28,450,436	22,809,357
Quebec.....	362,078,282	270,549,115	296,331,345
Ontario.....	598,456,379	469,654,705	473,015,674
Manitoba.....	134,039,184	86,665,622	92,286,842
Saskatchewan.....	89,942,132	56,568,615	50,778,824
Alberta.....	66,912,332	49,736,832	53,310,467
British Columbia.....	119,716,747	90,871,659	81,525,976
Yukon.....	1,380,383	1,621,072	1,882,450
Total.....	1,462,529,170	1,092,407,925	1,108,027,871

37.—Number of Individual and Corporate Taxpayers, by Size of Incomes and Amount of Taxes Paid, under the Income War Tax Act, fiscal years ended March 31, 1922-1924.

1.—INDIVIDUALS.

Income-Class.	1922.		1923.		1924.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.
		\$		\$		\$
\$ 1,000 to \$ 6,000.....	154,675	4,022,056	146,178	3,414,475	127,718	3,066,580
\$ 2,000 to \$ 6,000.....	116,212	5,557,503	113,359	4,616,287	94,580	3,934,537
\$ 6,000 to \$10,000.....	11,840	3,981,303	13,030	3,603,536	10,140	3,187,012
\$10,000 to \$20,000.....	5,404	5,460,899	6,069	5,212,937	4,700	4,288,847
\$20,000 to \$30,000.....	1,290	3,629,108	1,365	2,997,914	1,047	2,521,615
\$30,000 to \$50,000.....	667	4,295,530	801	3,810,107	—	—
\$50,000 and over.....	496	12,699,832	380	8,212,112	851	8,835,424
Total.....	290,584	39,646,231	281,182	31,867,368	239,036	25,834,015
Unclassified amount.....	—	824,778	—	490,046	—	533,799
Total.....	—	40,471,009	—	32,357,414	—	26,367,814
Refunds.....	—	650,412	—	667,997	—	710,478
Net Total.....	—	39,820,597	—	31,689,417	—	25,657,336

2.—CORPORATIONS.

Income-Class.	1922.		1923.		1924.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.
		\$		\$		\$
\$ 1,000 to \$ 6,000.....	—	—	—	—	—	—
\$ 2,000 to \$ 6,000.....	3,023	665,723	2,407	546,081	2,381	598,939
\$ 6,000 to \$10,000.....	1,508	926,596	1,052	699,621	868	725,264
\$10,000 to \$20,000.....	1,359	1,848,227	959	1,478,950	817	1,361,531
\$20,000 to \$30,000.....	690	1,581,102	437	1,148,752	372	1,051,806
\$30,000 to \$50,000.....	597	2,351,149	413	1,682,344	—	—
\$50,000 and over.....	1,109	31,724,339	742	22,987,549	1,126	25,817,750
Total.....	8,286	39,097,136	6,010	28,543,297	5,569	29,565,890
Unclassified amount.....	—	110,668	—	269,113	—	205,260
Total.....	—	39,207,804	—	28,812,410	—	29,770,950
Refunds.....	—	344,046	—	790,264	—	1,224,258
Net Total.....	—	38,863,758	—	28,022,146	—	28,546,692

38.—Income Tax Paid, by Classes, fiscal years 1922-24.

1.—INDIVIDUALS.

Classes.	1922.		1923.		1924.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.
		\$		\$		\$
Agrarians.....	18,841	1,299,105	8,220	473,049	4,663	275,627
Professionals.....	17,139	2,526,544	19,023	2,663,901	20,550	2,327,554
Employees.....	207,263	17,123,447	208,360	15,529,950	176,089	13,726,066
Merchants.....	23,716	7,140,101	21,186	5,474,256	17,031	2,816,352
Manufacturers.....	1,629	2,472,485	1,732	870,261	1,293	742,944
All others.....	21,996	9,084,549	22,661	6,855,951	19,410	5,945,472
Unclassified.....	—	824,778	—	490,046	—	533,799
Total.....	290,584	40,471,009	281,182	32,357,414	239,036	26,367,814
Refunds.....	—	650,412	—	667,997	—	710,478
Net Total.....	—	39,820,597	—	31,689,417	—	25,657,336

2.—CORPORATIONS.

Agrarians.....	32	25,589	10	7,304	13	6,302
Merchants.....	2,737	7,382,877	2,066	4,389,285	1,680	4,031,167
Manufacturers.....	2,393	18,193,185	1,618	11,541,870	1,535	12,332,859
All others.....	3,124	13,495,485	2,316	12,604,838	2,341	13,195,562
Unclassified.....	—	110,668	—	269,113	—	205,060
Total.....	8,286	39,207,894	6,010	28,812,410	5,569	29,770,950
Refunds.....	—	344,046	—	790,264	—	1,224,258
Net Total.....	—	38,863,758	—	28,022,146	—	28,546,692
Grand Total, Individuals and Corporations.....	—	78,684,355	—	59,711,563	—	54,204,028

II.—CURRENCY AND BANKING, LOAN AND TRUST COMPANIES.

1.—Canada's Monetary System.

Historical.—Early trade in Canada was carried on by means of barter, which at times resulted (in transactions between Indians and fur traders) in the adoption of beads, blankets, etc., as recognized media of exchange. The practice, however, was purely a local one. Later, during the French period in Canada, while barter still formed perhaps the most important means of exchange between individuals and merchants, a more or less satisfactory currency system developed. Beaver and other furs, tobacco and wheat were at times used as substitutes for currency, the last named being at one time a legal tender. A rather inadequate system was that which developed during the period of French military occupation, when playing cards, stamped with a value and signed by the Intendant, redeemable yearly on the receipt of bills of exchange on Paris, came into circulation. Other paper money, most of it of little value, was also issued, and the total amount outstanding at the time of the cession was estimated at 80,000,000 livres, the great bulk of which finally proved worthless.

The British government sought to establish a uniform standard of colonial currency, but since, at this time, French coinage again began to come into circulation and the Spanish dollar also rivalled the English shilling as the most common medium of exchange, this was not universally possible. English sovereigns were over-rated in terms of dollars in an endeavour to encourage their circulation. A rate of 5s. to the dollar was set in Halifax and was in use for government accounting systems, while in Montreal, York currency (the rates prevalent in New York), giving the dollar an exchange value of 7s. 6d. or 8s., was in common use.

Canadians had become more or less familiar with the characteristics of paper money from the experiences of the various northern States during the first half of the nineteenth century. During the war of 1812 this familiarity was increased by the establishment of an army bill office, issuing bills of various denominations redeemable on presentation. Increased commercial relations between the two countries and a growing volume of trade resulted in a tendency in Canada toward a decimal coinage, and in 1853 a measure was passed providing for the adoption of a decimal currency with a dollar equivalent to the American dollar; the British sovereign was made legal tender at \$4.86 $\frac{2}{3}$. An Act of 1857 requiring all government accounts to be kept in dollars and cents came into force on Jan. 1, 1858; the formal adoption of decimal currency in the province of Canada dates from that time.

By the Uniform Currency Act of 1871 (34 Vict., c. 4), the decimal currency was extended throughout the Dominion, the British sovereign was made legal tender for \$4.86 $\frac{2}{3}$ and the United States eagle legal tender for \$10, while authority was taken to coin a Canadian \$5 gold piece. No Canadian gold coinage was, however, issued prior to the establishment of the Canadian branch of the Royal Mint in 1908, the first coins then struck being sovereigns similar to those of Great Britain, but with a small "C" identifying them as having been coined in Canada. In May, 1912, the first Canadian \$10 and \$5 gold pieces were struck, but the Canadian gold coinage has so far been limited in amount, since Canadians have generally preferred Dominion notes to gold for use within the country, and when gold is needed for export, bullion or British and American gold coin serve the purpose equally well.

Gold.—Gold is used only to an insignificant extent as a circulating medium in Canada, its monetary use being practically confined to reserves, but 5-dollar and 10-dollar gold pieces weighing respectively 129 and 258 grains, 9-10 pure gold by weight, have been coined, the Canadian gold dollar thus containing 23.22 grains of pure gold. These coins were first issued in 1912, authority to issue them having been first conferred in 1910. By the Currency Act, 1910 (9-10 Edw. VII, c. 14), British sovereigns, which are legal tender for \$4.86 $\frac{2}{3}$, and other gold coins, and the 5-dollar, 10-dollar and 20-dollar gold coins of the United States, which contain the same weight of gold as Canadian gold coins of these denominations, are also legal tender. These, however, are almost entirely divided between the Dominion Government and the banks as reserves, and the chief circulating medium of the country is provided by paper and token currency. The gold coinages of the Ottawa branch of the Royal Mint, which was opened on January 2, 1908, are given in Tables 39 and 40. Table 41, compiled by the Dominion Comptroller of Currency, gives the form in which the gold has been held by the Government in recent years. The American gold, it will be seen, greatly preponderates, and there is a considerable additional amount held by the banks, as it is legal tender in both countries.

39.—Coinage at the Ottawa Branch of the Royal Mint in the calendar years 1921-23.

Description of Coins.	1921.		1922.		1923.	
	Struck.	Issued.	Struck.	Issued.	Struck.	Issued.
Gold Sovereigns.....	—	136	—	—	—	—
	or	or				
	—	\$661.87				
Gold—	\$	\$	\$	\$	\$	\$
Canadian \$5's.....	—	—	—	—	—	—
\$10's.....	—	—	—	—	—	—
Silver.....	603,081.80	128,000.00	—	24,000.00	—	28,000.00
Bronze.....	75,559.64	60,700.00	12,439.03	12,400.00	10,191.60	19,300.00
Nickel (5c.).....	—	—	238,159.30	69,000.00	123,760.05	127,000.00

In addition to the above coinage, the following were executed for the Governments of Newfoundland and Jamaica:—

	1917.	1918.	1919.	1920.
Newfoundland—Silver.....	\$240,000	\$245,000	\$200,000	—
Bronze.....	\$7,000	—	\$3,000	\$3,000
	£	s. d.	£	s. d.
Jamaica—Cupro-nickel.....	1,515	9 7½	2,061	14 1

40.—Gold Coinages of the Ottawa Branch of the Royal Mint, 1908-1923.

Years.	Gold.			Years.	Gold.		
	Sovereigns.		Canadian Currency. ¹		Sovereigns.		Canadian Currency. ¹
	£	\$	\$		£	\$	\$
1908.....	636	3,095.20	—	1916.....	6,111	29,740.20	—
1909.....	16,273	79,195.27	—	1917.....	58,845	286,379.00	—
1910.....	28,012	136,325.07	—	1918.....	106,516	518,377.87	—
1911.....	256,946	1,250,470.53	—	1919.....	135,889	661,326.47	—
1912.....	—	—	1,477,710	1920.....	—	—	—
1913.....	3,715	18,079.67	1,890,620	1921.....	—	—	—
1914.....	14,891	72,469.53	1,499,575	1922.....	—	—	—
1915.....	—	—	—	1923.....	—	—	—

¹Authority to issue Canadian gold coins was first conferred in 1910.

41.—Composition of Canadian Gold Reserves, December 31, 1905-1923.

Years.	British Coin.	American Coin.	Canadian Coin.	Bullion.
	\$	\$	\$	\$
1905.....	3,990,717	29,494,298	—	—
1906.....	7,375,857	31,040,149	—	—
1907.....	5,366,478	33,529,889	—	—
1908.....	6,261,715	54,909,076	—	—
1909.....	6,537,227	62,988,474	—	—
1910.....	6,304,524	68,261,279	—	—
1911.....	6,900,095	93,507,764	—	222,934
1912.....	4,554,691	98,648,736	650,185	222,934
1913.....	6,391,375	106,642,969	2,118,210	222,934
1914.....	4,482,524	86,382,620	3,440,150	320,345
1915.....	29,606,990	86,516,595	3,436,095	775,201
1916.....	29,333,111	86,034,920	3,426,760	803,602
1917.....	27,476,790	77,899,494	3,413,465	11,352,856
1918.....	27,362,255	75,785,665	3,411,465	14,701,439
1919.....	27,661,192	60,988,110	3,408,310	27,154,222
1920.....	26,728,016	35,896,485	3,387,125	35,090,344
1921.....	26,729,501	35,896,305	3,385,090	18,558,557
1922.....	26,730,576	67,941,550	3,340,650	34,572,504
1923.....	18,114,680	33,830,850	3,242,150	46,026,852

Token Currency.—Canadian silver dollars weighing 360 grains, 37-40 fine, are provided for by the Currency Act of 1910, but no dollar coins have ever been struck by the Mint. Fifty, twenty-five, ten and five-cent pieces of weight proportionate to their respective fractions of the dollar, and of the same fineness, are

in circulation, but, by chapter 9 of the Statutes of 1920, the standard of fineness was reduced to 8-10ths. In 1921 the coinage of a nickel five-cent piece weighing 70 grains was authorized, and a number of these coins have appeared. Silver coins are legal tender only up to ten dollars, nickel coins to five dollars, and bronze coins to twenty-five cents.

42.—Circulation in Canada of Silver and Bronze Coin, December 31, 1901-1923.

Years.	Net Amount of Silver Coin Issued.		Amount per Head.		Net Amount of Bronze Coin Issued.		Amount per Head.	
	A. During the Year.	B. Since 1858.	Col. A.	Col. B.	C. During the Year.	D. Since 1858.	Col. C.	Col. D.
	\$	\$	cts.	\$	\$	\$	cts.	cts.
1901.....	420,000	8,279,924	7-8	1-53	41,000	676,429	0-8	11-0
1902.....	774,000	9,053,924	14-0	1-64	30,000	706,429	0-5	12-8
1903.....	633,850	9,687,774	11-1	1-70	40,000	746,429	0-7	13-1
1904.....	350,000	10,037,774	5-9	1-71	25,000	771,429	0-4	13-1
1905.....	450,000	10,487,774	7-4	1-72	20,000	791,429	0-3	13-0
1906.....	807,461	11,295,235	12-8	1-79	41,000	832,429	0-6	13-2
1907.....	1,194,000	12,489,235	17-9	1-88	32,000	864,429	0-5	13-0
1908.....	38,541	12,527,776	0-6	1-80	21,604	886,033	0-3	12-8
1909.....	648,700	13,176,476	9-0	1-83	39,300	925,333	0-5	12-9
1910.....	1,151,186	14,327,662	15-4	1-91	42,020	967,353	0-6	12-9
1911.....	1,343,001	15,670,663	18-6	2-18	54,275	1,021,628	0-8	14-2
1912.....	1,303,237	16,973,900	17-7	2-30	49,977	1,071,605	0-7	14-5
1913.....	927,131	17,901,031	12-3	2-38	55,572	1,127,177	0-7	15-0
1914.....	626,198	18,527,229	8-1	2-41	35,057	1,162,234	0-4	15-1
1915.....	61,344	18,588,573	0-8	2-36	50,354	1,212,588	0-6	15-4
1916.....	1,179,516	19,768,089	14-7	2-46	110,646	1,323,234	1-4	16-5
1917.....	1,790,941	21,559,030	21-9	2-64	116,800	1,440,034	1-4	17-6
1918.....	2,329,091	23,888,121	28-0	2-87	131,777	1,571,811	1-6	18-9
1919.....	3,196,027	27,084,148	37-7	3-19	115,011	1,686,822	1-4	19-9
1920.....	1,300,702	28,384,850	15-1	3-29	208,961	1,895,783	2-4	22-0
1921.....	40,191	28,344,659	0-5	3-23	60,543	1,956,326	0-7	22-3
1922.....	—	26,620,740 ¹	0-0	2-97	3,858	1,960,184	0-0	21-9
1923.....	—	26,559,530 ¹	0-0	2-90	15,520	1,975,704	0-0	21-6

¹ The decrease shown for 1922 and for 1923 is due to the withdrawal of worn and mutilated silver coins from circulation.

Note.—Nickel coinage in circulation on Dec. 31, 1923, amounted to \$164,580.

Dominion Notes.—An important part of the Canadian monetary system is the paper currency of the Dominion Government. Under the Dominion Notes Act, 1914 (5 Geo. V, c. 4), the Dominion Government is authorized to issue notes up to and including \$50,000,000 against a reserve in gold equal to one-quarter of that amount. By Chapter 4, Acts of 1915, "An Act respecting the Issue of Dominion Notes," the Dominion Government is authorized to issue notes up to \$26,000,000 without any reserve of gold, \$16,000,000 of the notes to be against certain specified Canadian railway securities guaranteed by the Dominion Government.¹ Notes

¹ The following is an outline of Canadian legislation respecting the issue of notes. After Confederation, by an Act of 1868 (31 Vict., c. 46), authority was given for the issue of notes to the extent of eight million dollars. The reserve was fixed at 20 p.c. up to a circulation of five millions; beyond that, 25 p.c. to be held as reserve. The law of 1870 (33 Vict., c. 10), authorized a limit of nine million dollars. The reserve was fixed at 20 p.c., but the nine millions were only to be issued when the specie amounted to two millions. Dollar for dollar was to be held beyond nine millions. In 1872, (35 Vict., c. 7), the reserve for the excess over nine millions was fixed at 35 p.c. in specie. This was amended in 1875 (38 Vict., c. 5) by requiring dollar for dollar beyond twelve millions; for the reserve between nine and twelve millions, 50 p.c. in specie was to be held. In 1878 the law respecting Dominion notes was extended to the provinces of Prince Edward Island, British Columbia and Manitoba. In 1889 (43 Vict., c. 13), the basis of the present standard was established. A reserve of 25 p.c. in gold and guaranteed debentures was required, of which 15 p.c. at least was to be in gold. The limit was raised to twenty million dollars. In 1894 (57-58 Vict., c. 21), the limit was raised to twenty-five millions but this was found unworkable and was repealed in 1895 (58-59 Vict., c. 16), and authority was given to issue notes to any amount over twenty millions, on holding dollar for dollar beyond that sum. In 1903 (3 Edw. VII, c. 43), the Minister of Finance was required to hold gold and guaranteed debentures of not less than 25 p.c. on Dominion notes issued and outstanding up to thirty million dollars; beyond thirty millions he was required to hold gold equal to the excess. In 1914 (5 Geo. V, c. 4), this amount was raised to fifty millions and in 1915 to seventy-six millions, under the conditions stated in the text. The Finance Act, 1914 (5 Geo. V, c. 3), makes provision, in case of war, panic, etc. for the issue of Dominion notes against approved securities.

may be issued to any additional amount in excess of \$76,000,000, but (except as provided by the Finance Act, 1914) an amount of gold equal to the excess must be held. Thus Dominion notes normally approximate to gold certificates. Under the Act, the Government issues notes of the denominations of 25 cents, \$1, \$2, \$4, \$5, \$50, \$100, \$500 and \$1,000. In addition, "special" notes of the denominations of \$500, \$1,000, \$5,000 and \$50,000 (first issue September, 1918), are issued for use between banks only, the purpose being to safeguard against theft. Table 43 gives the main statistics of Dominion note circulation and the reserve on which it has been built since 1890, Table 44 statistics of gold held by the Minister of Finance from 1919 to 1923, while Table 45 shows the use of notes of different denominations during the past six years.

43.—Dominion Note Circulation and Reserve at June 30, 1890-1924.

Years ended June 30.	Notes in circulation.					Reserves of Specie and Guaranteed Debentures. ⁴	Circulation uncovered by Specie.	Percentage Reserve to Circulation.
	Notes 1, 2, 4 and 5, and fractionals. ¹	Large notes 50, 100, 500, 1000, 5000. ²	Total.					
			Amount.	Per capita.	Index No. ³			
	\$	\$	\$	\$		\$	\$	p.c.
1890.....	6,665,942	8,691,950	15,357,892	3-20	65-3	5,232,181	10,125,711	34
1891.....	6,768,666	9,407,650	16,176,316	3-34	68-2	5,723,693	10,452,623	35
1892.....	6,898,348	10,384,350	17,282,698	3-53	72-0	6,868,243	10,414,455	40
1893.....	7,136,743	11,311,750	18,448,493	3-73	76-1	8,396,014	10,052,479	45
1894.....	6,967,818	13,093,900	20,061,718	4-09	83-5	10,239,071	9,822,647	51
1895.....	7,059,331	12,460,900	19,520,231	3-87	79-0	9,707,750	9,812,481	49
1896.....	7,377,096	12,995,100	20,372,196	4-00	81-6	10,704,901	9,667,295	52
1897.....	7,519,345	14,798,750	22,318,095	4-34	88-6	12,667,315	9,650,780	56
1898.....	8,157,243	14,020,950	22,178,193	4-26	86-9	12,760,405	9,417,788	57
1899.....	8,770,165	15,466,300	24,236,465	4-60	93-9	15,008,441	9,228,024	61
1900.....	9,640,473	16,454,450	26,094,923	4-90	100-0	14,422,710	11,672,213	55
1901.....	10,161,809	17,736,700	27,898,509	5-19	105-9	16,503,740	11,394,769	59
1902.....	11,029,985	21,750,400	32,780,385	5-92	120-8	20,848,305	11,932,080	63
1903.....	12,173,248	26,832,950	39,006,198	6-87	140-2	27,877,260	11,128,938	67
1904.....	12,581,833	28,992,950	41,574,783	7-13	145-5	25,369,291	16,205,492	61
1905.....	13,045,820	34,288,400	47,334,220	7-89	161-0	31,272,122	16,062,098	66
1906.....	14,633,576	35,307,850	49,941,426	8-09	165-1	30,960,597	18,980,829	62
1907.....	15,939,131	42,377,400	58,316,531	9-25	188-7	36,935,936	21,380,595	63
1908.....	15,279,675	47,778,450	63,058,125	9-71	198-2	41,107,850	21,950,275	65
1909.....	15,860,149	63,145,150	79,005,299	11-80	240-8	57,309,932	21,695,367	72
1910.....	17,871,477	71,414,250	89,285,727	12-90	263-3	68,355,787	20,929,940	75
1911.....	19,840,695	79,468,250	99,308,945	13-78	281-2	78,005,231	21,303,714	78
1912.....	22,982,588	88,949,650	111,932,238	15-19	310-0	92,442,098	19,490,140	82
1913.....	28,845,737	87,517,800	116,363,537	15-45	315-3	94,943,499	21,420,038	81
1914.....	24,586,448	89,595,650	114,182,098	14-84	302-8	92,663,575	21,518,523	81
1915.....	25,183,685	126,937,050	152,120,735	19-34	394-7	89,573,041	62,547,693	59
1916.....	27,283,425	148,213,750	175,497,175	21-84	445-7	114,071,032	61,426,143	66
1917.....	29,498,409	149,069,600	178,568,009	21-82	445-3	119,110,113	59,457,896	67
1918.....	32,623,514	248,716,000	281,339,514	33-78	689-4	114,951,618	166,387,896	41
1919.....	35,084,194	265,665,650	300,749,844	35-47	723-9	118,268,407	182,481,437	39
1920.....	37,203,890	254,812,400	292,016,290	33-83	690-4	95,538,190	196,478,100	33
1921.....	34,403,934	234,365,250	268,769,184	30-58	624-1	83,854,487	184,914,697	31
1922.....	31,404,161	201,344,250	232,748,411	25-96	529-8	85,495,068	147,253,343	37
1923.....	33,276,533	200,869,900	234,146,433	25-60	522-4	121,025,725	113,120,708	52
1924.....	34,816,442	175,492,150	210,308,592	22-54	460-0	96,732,954	113,575,638	54

¹ Includes Provincial notes amounting to \$32,857 in 1890 and reduced gradually to \$27,692 in 1924.

² Includes issue of \$50,000 notes, 1919-1924.

³ Circulation in 1900 is taken as 100.

⁴ Guaranteed debentures amounted to \$1,946,666 from 1890 to 1910 and to \$16,000,000 from 1915 to 1924.

44.—Gold held by the Minister of Finance during the years 1919-1923¹.

Years.	Gold Reserve held on Savings Bank Deposits.	Gold held for redemption of Dominion Notes.	Total Gold held by Minister of Finance.
	\$	\$	\$
1919.....	4,909,675	118,489,692	123,399,367
1920.....	4,067,897	98,751,773	102,819,670
1921.....	3,666,009	84,568,064	88,234,073
1922.....	3,293,287	89,939,108	93,232,395
1923.....	3,154,358	120,651,627	123,805,985

¹ Yearly average.

45.—Denominations of Dominion Notes in Circulation, March 31, 1919-1924.

Denominations.	1919.	1920.	1921.	1922.	1923.	1924.
\$	\$	\$	\$	\$	\$	\$
1.....	15,217,261	16,550,738	16,456,102	15,387,109	15,921,295	16,491,335
2.....	12,161,480	13,238,915	12,819,010	11,335,549	11,854,372	12,051,573
4.....	39,439	38,299	37,567	36,735	35,791	34,915
5.....	4,772,455	3,434,275	3,699,880	1,886,410	2,154,470	2,975,625
50.....	4,200	3,950	3,800	3,750	3,750	150
100.....	—	—	—	—	—	—
500.....	1,868,500	2,596,000	2,683,500	2,728,500	3,034,000	2,022,000
1,000.....	4,146,000	4,773,000	5,050,000	4,999,000	6,019,000	4,209,000
500 special.....	124,500	95,000	70,000	13,500	2,000	—
1,000 ".....	992,000	1,159,000	962,000	931,000	935,000	982,000
5,000 ".....	213,505,000	234,105,000	191,980,000	142,505,000	124,845,000	96,840,000
50,000 ".....	44,000,000	34,650,000	42,800,000	60,350,000	76,550,000	79,700,000
Fractional.....	1,200,120	1,260,872	1,293,283	1,257,163	1,275,372	1,290,715
Provincial.....	27,743	27,743	27,743	27,710	27,710	27,691
Total.....	298,058,698	311,932,792	277,882,885	241,461,426	242,657,765	216,625,004

Bank Notes.—Bank notes form the chief circulating medium in use in Canada. Under the Canadian Bank Act, the banks are authorized to issue notes of the denominations of \$5 and multiples thereof to the amount of their paid-up capital. These notes are not in normal times legal tender.

In addition, during the period of the movement of the crops (September 1 to February 28-29), the banks may issue "excess" circulation to the amount of 15 p.c. of their combined capital and "rest or reserve" funds. In the event of war or panic, the Government may permit the "excess" to run all the year. The banks pay interest on the excess at 5 p.c. If a bank desires to extend its circulation, it may also do so by depositing dollar for dollar in gold or Dominion notes in the central gold reserves.

In case of insolvency, the notes of a bank are a first lien upon its assets. They are further secured, in case of insolvency, by the Bank Circulation Redemption Fund, to which all banks contribute on the basis of 5 p.c. of their average circulation, the sum thus secured being available for the redemption of the notes of failed banks.

The figures of bank note circulation are given in Table 46. Table 47 brings together the results obtained above as to the quantity of the circulating medium in the hands of the Canadian public.

46.—Statistics of Bank Note Circulation, 1892-1923.¹

Years.	Paid up Capital.	"Rest" Fund.	"Redemption" Fund. ² (Deposits with Minister of Finance.)	Notes in Circulation.		
				Amount.	Per Capita.	Index No. ³
	\$	\$	\$	\$	\$	
1892.....	61,626,311	24,511,709	1,314,240	33,788,679	6.91	79.0
1893.....	62,009,346	25,837,753	1,790,619	33,811,925	6.85	78.3
1894.....	62,063,371	27,041,235	1,817,511	31,166,003	6.37	72.8
1895.....	61,800,700	27,273,500	1,814,089	30,807,041	6.12	69.9
1896.....	62,043,173	26,526,632	1,831,191	31,456,297	6.18	70.6
1897.....	62,027,703	27,087,782	1,864,937	34,350,118	6.68	76.3
1898.....	62,571,920	27,627,520	1,938,660	37,873,934	7.28	83.2
1899.....	63,726,399	28,958,989	2,033,865	41,513,139	7.89	90.2
1900.....	65,154,594	32,372,394	2,221,128	46,574,780	8.75	100.0
1901.....	67,035,615	36,249,145	2,487,541	50,601,205	9.36	107.0
1902.....	69,869,670	40,212,943	2,832,401	55,412,598	10.02	114.5
1903.....	76,453,125	47,761,536	2,971,260	60,244,072	10.62	121.4
1904.....	79,234,191	52,082,335	3,237,891	61,769,888	10.60	121.1
1905.....	82,655,828	56,474,124	3,448,463	64,025,643	10.68	122.1
1906.....	91,035,604	64,002,266	3,923,531	70,638,870	11.44	130.7
1907.....	95,953,732	69,806,892	4,304,524	75,784,482	12.02	137.4
1908.....	96,147,526	72,041,265	4,249,367	71,401,697	11.00	125.7
1909.....	97,329,333	75,887,695	4,317,006	73,943,119	11.04	126.2
1910.....	98,787,929	79,970,346	4,844,475	82,120,303	11.87	135.7
1911.....	103,009,256	88,892,256	5,353,838	89,982,223	12.57	143.7
1912.....	112,730,943	102,090,476	6,211,881	100,146,541	13.60	155.4
1913.....	116,297,729	109,129,393	6,536,341	105,265,336	13.98	160.0
1914.....	114,759,807	113,130,626	6,693,684	104,600,185	13.60	155.4
1915.....	113,982,741	113,020,310	6,756,648	105,137,092	13.37	152.8
1916.....	113,175,353	112,989,541	6,811,213	126,691,913	15.77	180.2
1917.....	111,637,755	113,560,997	6,324,442	161,029,606	19.69	225.0
1918.....	110,618,504	114,041,500	5,817,646	198,645,254	23.85	272.6
1919.....	115,004,960	121,160,774	6,054,419	218,919,261	25.82	295.1
1920.....	123,617,120	128,756,690	6,122,715	228,800,379	26.51	303.0
1921.....	129,096,339	134,104,030	6,417,287	194,621,710	22.15	253.1
1922.....	125,456,485	129,627,270	6,493,593	166,466,109	18.56	212.1
1923.....	124,373,293	126,441,667	6,662,665	170,420,792	18.63	212.9

¹ The statistics in this table are averages computed from monthly returns in each year.² Cash, i.e., gold or Dominion notes.³ Circulation in 1900 is taken as 100.

47.—Circulating Medium in Hands of the Public, 1900-1923.

Years.	Silver.		Bronze.		Bank Notes.	
	Amount.	Per Capita.	Amount.	Per Capita.	Amount. ³	Per Capita.
	\$	\$	\$	\$	\$	\$
1900.....	7,911,998	1.49	635,429	.11	46,574,780	8.75
1901.....	8,279,924	1.53	676,429	.12	50,601,205	9.36
1902.....	9,053,924	1.64	706,429	.13	55,412,598	10.02
1903.....	9,687,774	1.70	746,429	.13	60,244,072	10.62
1904.....	10,037,774	1.71	771,429	.13	61,769,888	10.68
1905.....	10,487,774	1.72	791,429	.13	64,025,643	10.68
1906.....	11,295,235	1.79	832,429	.13	70,638,870	11.45
1907.....	12,489,235	1.88	864,429	.13	75,784,482	12.03
1908.....	12,527,776	1.80	886,033	.13	71,401,697	11.00
1909.....	13,176,476	1.83	925,333	.13	73,943,119	11.04
1910.....	14,327,662	1.91	967,353	.13	82,120,303	11.87
1911.....	15,670,663	2.18	1,021,628	.14	89,982,223	12.49
1912.....	16,973,900	2.30	1,071,605	.15	100,146,541	13.60
1913.....	17,901,031	2.38	1,127,177	.15	105,265,336	13.98
1914.....	18,527,229	2.41	1,162,234	.15	104,600,185	13.60
1915.....	18,588,573	2.36	1,212,588	.15	105,137,092	13.37
1916.....	19,768,089	2.46	1,323,234	.17	126,691,913	15.77
1917.....	21,559,030	2.64	1,440,034	.18	161,029,606	19.69
1918.....	23,888,121	2.87	1,571,811	.19	198,645,254	23.12
1919.....	27,084,148	3.19	1,686,822	.20	218,919,261	23.82
1920.....	28,384,850	3.29	1,895,783	.22	228,800,379	26.51
1921.....	28,344,659	3.23	1,956,326	.22	194,621,710	22.15
1922.....	26,620,740	2.97	1,960,184	.22	166,466,109	18.56
1923.....	26,559,530	2.90	1,975,704	.22	170,420,792	18.63
Years.	Dominion Notes, ¹ \$1, \$2, \$4, \$5 and fractionals. ²		Totals.			
	Amount ³ .	Per Capita.	Amount.	Per Capita.	Index Number per Capita. ⁴	
	\$	\$	\$	\$		
1900.....	9,997,044	1.88	65,119,251	12.24	100.0	
1901.....	10,595,169	1.97	70,152,727	13.06	106.7	
1902.....	11,442,138	2.07	75,615,089	13.67	111.7	
1903.....	12,321,172	2.17	82,999,447	14.63	119.5	
1904.....	12,813,912	2.20	85,393,003	14.66	119.8	
1905.....	13,499,894	2.25	88,804,740	14.82	121.1	
1906.....	14,797,483	2.40	97,564,017	15.81	129.2	
1907.....	15,973,227	2.53	105,111,373	16.68	136.3	
1908.....	15,615,082	2.41	100,430,588	15.47	126.4	
1909.....	16,235,774	2.43	104,280,702	15.58	127.3	
1910.....	18,098,111	2.62	115,513,429	16.70	136.4	
1911.....	21,497,429	2.98	128,171,943	17.79	145.3	
1912.....	27,277,341	3.70	145,469,887	19.75	161.3	
1913.....	29,067,278	3.86	153,860,822	20.37	166.4	
1914.....	26,964,063	3.51	151,253,711	19.66	160.6	
1915.....	25,881,570	3.29	150,819,823	19.18	156.7	
1916.....	27,857,543	3.47	175,640,779	21.86	178.6	
1917.....	31,221,311	3.82	215,249,981	26.31	214.9	
1918.....	34,146,836	4.10	258,252,022	31.01	253.3	
1919.....	35,492,643	4.19	283,182,874	33.40	272.8	
1920.....	37,272,725	4.22	296,353,737	34.33	280.5	
1921.....	33,825,582	3.85	258,748,277	29.44	240.5	
1922.....	31,888,024	3.56	226,935,057	25.31	206.8	
1923.....	33,387,155	3.65	232,343,181	25.40	207.5	

¹ Dominion notes of larger denominations in hands of banks not included.² Includes Provincial notes.³ Yearly average. ⁴ Per capita circulation in 1900=100.

2.—Banking in Canada.

Historical.—In the early days of banking in older countries, one of the chief functions of banks was to issue promissory notes payable to the bearer on demand; where the bank's credit was good these notes passed freely from hand to hand, creating an auxiliary uniform circulating medium, which in various cases was preferred to that issued by national governments.

The lack of a uniform circulating medium in Canada was felt by the merchants of Montreal toward the end of the eighteenth century, and the prospectus of a proposed bank of issue to be known as the Canada Banking Company was issued in 1792. This scheme, however, was allowed to drop, while a second project in 1808, for the incorporation of a Bank of Canada, failed to secure the assent of the Legislature of Lower Canada.

At the close of the war of 1812, the Army Bill currency was withdrawn, and public attention once more turned to the expediency of securing a currency through the establishment of banks. The Bank of Montreal began business toward the end of 1817, with a charter based on that of the First Bank of the United States. In the following year the Quebec Bank was established, as well as the Bank of Canada at Montreal and the Bank of Upper Canada at Kingston. The three Lower Canadian institutions, commencing as private banks, obtained their charters in 1822, while the Bank of Upper Canada, also a private institution, was superseded by a second Bank of Upper Canada, established at York (Toronto) as a chartered bank in 1821. Meanwhile the Bank of New Brunswick had been incorporated in 1820, while in Nova Scotia the Halifax Banking Co. (private) had commenced business in 1825, and the Bank of Nova Scotia received a regular charter in 1832. The Bank of British North America, previously incorporated in Great Britain, commenced business in Canada in 1836, while Molsons Bank was established in 1853, the Bank of Toronto in 1855, the Banque Nationale in 1860 and the Banque Jacques-Cartier (later the Banque Provinciale du Canada) in 1862. The Union Bank was established in 1866, the Canadian Bank of Commerce in 1867, the Merchants' Bank of Halifax (now the Royal Bank) in 1869, the Dominion Bank in 1871, the Bank of Hamilton in 1872, the Banque d'Hochelega in 1873, the Bank of Ottawa in 1874, the Imperial Bank in 1875 and the Standard Bank in 1876.

The Canadian Banking System.¹—A brief *résumé* of the Canadian Banking system should emphasize its growth, from the beginning closely related to the Montreal produce and export trade, its development of the branch bank system in order to meet the demands of a rapidly moving frontier of settlement, its adaptation to the requirements of the grain and cattle trade of the west, and the consolidation during later years of the features which tended towards its early success. Development of a stable system has been accompanied by failures, particularly marked about the middle of the 19th century, but progress has nevertheless been steady, based on sound principles and adapted as closely as could be to the particular needs of the country.

The branch bank forms perhaps the most distinctive feature of the Canadian system as it exists today, and for a country such as Canada, vast in area and with a small population, the plan has proved a good one. A result of the growth of branch banks has been the partially centralized system that now obtains—centralized as to banks, of which there are now 12², rather than as to districts, as in the partially centralized system of the United States.

¹ For details regarding Canadian bank note issue, see page 789.

² Jan. 31, 1925.

A second peculiarity of the system may be noted—the existence and operation of the Canadian Bankers' Association. Through this body, which was incorporated in 1900 and acts under the authority of the Dominion Treasury Board, co-operation of individual banks is facilitated and encouraged. The Association supervises clearing house transactions, appoints curators to supervise the affairs of banks which have suspended business and oversees the printing and issue of notes to its members. Adherence to similar principles and a linking together of the credit of the system result from the co-operation secured through the association.

The elimination of weaker banks and their amalgamation with more stable ones has been a progressive move towards greater efficiency. Co-operation between the banks and the Dominion Government has been made permanent through the medium of periodic returns and the regulation of note issues and reserves.

Apart from the many detailed services rendered to its clients, the Canadian banking system may be said, in addition, to perform three main functions. In brief, they are as follows:

1. To put into circulation the paper currency which forms the circulating medium for small exchanges.
2. To provide a mechanism of exchange by the issue of bills of exchange, etc.
3. To form a means by which the credit of the banks and unused deposits may be put to immediate productive use.

Banking Legislation.—Note issue was formerly considered as the chief function of the banks, and banking legislation dealt mainly with such issue. In 1830 the Banking Act was amended so that the total amount of notes of less than \$5 in circulation might not at any one time exceed one-fifth of the paid up capital, that no notes under \$1 should be issued and that all issues of less than \$5 might be limited or suppressed by the Legislature. In 1841, in the first session of the Canadian Legislature after the Union, the Banking Act imposed a tax of 1 p.c. upon the bank note circulation, together with provisions for the double liability of shareholders. In 1850 a new Act prohibited any bank other than those incorporated by Act of Parliament or Royal Charter from issuing notes. The tax on circulation was abolished, and instead a deposit with the Government of \$100,000 in provincial debentures was required; for the first time monthly bank statements were required to be furnished to the Government.

In 1871, the first Dominion Bank Act provided for a minimum capital of \$500,000, the restriction of bank note issue to notes of \$4 and upwards, the redemption by banks of their own notes at any of their offices, the limitation of dividends until a reasonably large reserve fund had been accumulated, the holding of Dominion notes to the extent of at least one-third of the cash reserve, the prohibition of a bank lending money on its own stock; the forfeiture of the charter of any bank which left any of its liabilities unpaid for 90 days; also, in order that the double liability might be effectively enforced, banks were required to transmit certified lists of shareholders to the Minister of Finance. The charters were granted for ten years only, so as to facilitate the contemplated decennial revisions of the Act.

The first revision of the Bank Act took place in 1881. The noteholder was now recognized as prior creditor, the banks were prohibited from issuing notes under \$5, while notes of higher denominations were to be multiples of this sum. Dominion notes were to constitute not less than 40 p.c. of a bank's cash reserve, and banks were upon request to pay in Dominion notes sums not exceeding \$50.

At the second revision of the Bank Act (1891), the chief change was the establishment of the Bank Note Circulation Redemption Fund, founded as a consequence of

the losses to which the noteholders of insolvent banks were still subjected through being unable to turn their notes into cash. It was provided that bank notes should bear interest from the day of suspension of the bank until the date when their redemption was undertaken by the liquidator. If this was not done within two months, the Minister of Finance was authorized to redeem them out of the Bank Circulation Redemption Fund. Such expenditure, if not made good out of the assets of the failed bank, was to be provided by contributions from the other banks *pro rata* to circulation.

At the third regular revision of the Bank Act, in 1901, the Canadian Bankers' Association was given authority to appoint an inspector to supervise the bank note circulation and see that no bank issued circulation in excess of its paid-up capital. In 1908 provision was made for emergency circulation during the crop-moving season from October to January, during which banks were allowed to issue excess circulation up to 15 p.c. of their combined paid-up capital and reserve or rest fund, this emergency circulation to be taxed at the rate of 5 p.c. per annum. In 1912 the period during which emergency circulation might be issued was extended to the six months from September to February inclusive.

At the fourth revision, which took place in 1913, the Bank Act was amended by providing for the establishment of central gold reserves in which banks might deposit gold or Dominion notes, issuing additional notes of their own against such deposit. A shareholders' audit was also provided for. As a consequence of the war, the provision for emergency circulation was extended to cover the whole year in 1914, while banks were authorized to make payments in their notes instead of in gold or Dominion notes.

The fifth revision of 1923 (13-14 Geo. V, c. 32) resulted in numerous important changes. The qualifications of provisional directors were re-defined in sec. 11, while provision was made for keeping records of attendance at directors' meetings and bringing them to the notice of shareholders. Annual and special statements were given further attention and more complete returns were required from the banks, particularly in cases where other operations than banking were carried on (sec. 54). Detailed provisions were added regarding a shareholders' audit of the banks' affairs (sec. 56), while the personal liability of directors in case of distribution of profits in excess of legal limits was fixed by sec. 59. Regulations regarding loans were amended (sec. 76), and annual returns to the Minister regarding real and immovable property were required (sec. 79). Registration of security for loans was provided for (sec. 88a); monthly and special returns were to be made when called for by the Minister (sec. 112); certain loans were prohibited (sec. 146); and the punishment of directors and other bank officials making false statements of a bank's position was stipulated in sec. 153.

Banking Statistics.—In Table 48 is given a historical summary of Canadian banking business since Confederation. In order to afford a clear view of the nature of banking transactions in Canada, bank liabilities have been classified in two main groups, liabilities to shareholders and liabilities to the public, the latter group only being considered when determining the ordinary financial position of any such institution. Assets are divided into four groups, other assets being included in the total. As of interest to students of banking practice, the proportionate development of capital and reserve funds may be pointed out, also the great increase in the proportion of liabilities to the public to total liabilities and the gradually increasing percentage of liabilities to the public to total assets.

48.—Historical Summary showing Development of the Canadian Banking Business, calendar years 1867-1923.

Calendar Years.	LIABILITIES.				
	Liabilities to Shareholders.		Liabilities to the Public.		
	Capital Paid Up.	Rest or Reserve Fund.	Notes in Circulation.	Total on Deposit. ¹	Total Liabilities to the Public.
	\$	\$	\$	\$	\$
1867 (6 mos.).....	30,926,470	—	9,346,081	31,375,316	43,273,969
1868.....	30,507,447	—	9,350,646	33,653,594	45,144,854
1869.....	30,782,637	—	9,539,511	40,028,090	50,940,226
1870.....	33,031,249	—	15,149,031	48,763,205	65,685,870
1871.....	37,095,340	—	20,914,637	56,287,391	80,250,974
1872.....	45,190,085	—	25,296,454	61,481,452	90,864,688
1873.....	54,690,561	—	27,165,878	65,426,042	98,982,668
1874.....	60,388,340	—	27,904,963	77,113,754	116,412,392
1875.....	64,619,513	—	23,035,039	74,042,446	104,669,356
1876.....	66,804,398	—	21,245,935	72,852,686	99,614,014
1877.....	65,206,009	—	20,704,338	74,166,287	99,810,731
1878.....	63,682,863	—	20,475,586	70,856,253	95,538,831
1879.....	62,737,276	—	19,486,103	73,151,425	96,760,113
1880.....	60,052,117	—	22,529,623	85,303,814	111,838,941
1881.....	59,534,977	—	28,516,692	94,346,481	127,176,249
1882.....	59,799,644	—	33,582,080	110,133,124	149,777,214
1883.....	61,390,118	—	33,283,302	107,648,383	145,938,095
1884.....	61,579,021	18,149,193	30,449,410	102,398,228	137,493,917
1885.....	61,711,566	17,879,716	30,720,762	104,014,660	138,762,695
1886.....	61,662,093	17,817,693	31,030,499	111,449,365	146,954,260
1887.....	60,860,561	17,873,582	32,478,118	112,656,985	149,704,402
1888.....	60,345,035	18,529,911	32,205,259	125,136,473	163,990,797
1889.....	60,229,752	19,766,426	32,207,144	134,650,732	173,029,602
1890.....	59,974,902	21,127,838	32,834,511	135,548,704	173,207,587
1891.....	60,700,697	22,821,501	33,061,042	143,396,968	187,332,325
1892.....	61,626,311	24,511,709	33,788,679	166,668,471	208,062,169
1893.....	62,009,346	25,837,753	33,811,925	174,776,722	217,195,975
1894.....	62,063,371	27,041,235	31,166,003	181,743,890	221,066,724
1895.....	61,800,700	27,273,500	30,807,041	190,916,939	229,794,322
1896.....	62,043,173	26,526,632	31,456,297	193,616,049	232,338,096
1897.....	62,027,703	27,087,782	34,350,118	211,788,096	252,660,708
1898.....	62,571,920	27,627,520	37,873,934	236,161,062	281,076,656
1899.....	63,726,399	28,958,989	41,513,139	266,504,528	318,624,033
1900.....	65,154,594	32,372,394	46,574,780	305,140,242	356,394,095
1901.....	67,035,615	36,249,145	50,601,205	349,573,327 ²	420,003,743
1902.....	69,869,670	40,212,943	55,412,598	390,370,493 ²	466,963,829
1903.....	76,453,125	47,761,536	60,244,072	424,167,140 ²	507,527,550
1904.....	79,234,191	52,082,335	61,769,888	470,265,744 ²	554,014,076
1905.....	82,655,828	56,474,124	64,025,643	531,243,476 ²	618,678,633
1906.....	91,035,604	64,002,266	70,638,870	605,968,513 ²	713,790,553
1907.....	95,953,732	69,806,892	75,784,482	654,839,711 ²	769,026,924
1908.....	96,147,525	72,041,265	71,401,697	659,367,015 ²	762,077,184
1909.....	97,329,333	75,887,695	73,943,119	783,298,880 ²	882,598,547
1910.....	98,787,929	79,970,346	82,120,303	909,964,839 ²	1,019,177,601
1911.....	103,009,256	88,892,256	99,982,223	980,433,788 ²	1,097,661,293
1912.....	112,730,943	102,090,476	100,146,541	1,102,910,883 ²	1,240,124,354
1913.....	116,297,729	109,129,393	105,265,336	1,126,871,523 ²	1,287,372,534
1914.....	114,759,807	113,130,626 ²	104,600,185	1,144,210,363 ²	1,309,944,006
1915.....	113,982,741	113,020,310	105,137,092	1,198,340,315 ²	1,353,629,123
1916.....	113,175,353	112,989,541	126,691,913	1,418,035,429 ²	1,596,905,337
1917.....	111,637,755	113,560,997	161,029,606	1,643,203,020 ²	1,866,228,236
1918.....	110,618,504	114,041,500	198,645,254	1,912,395,780 ²	2,184,359,820
1919.....	115,004,960	121,160,774	218,919,261	2,189,428,885 ²	2,495,582,568
1920.....	123,617,120	128,756,690	228,800,379	2,438,079,792 ²	2,784,068,698
1921.....	129,096,339	134,104,030	194,621,710	2,264,586,736 ²	2,556,454,190
1922.....	125,456,485	129,627,270	166,466,109	2,120,997,030 ²	2,364,822,657
1923.....	124,373,293	126,441,667	170,420,792	2,107,606,111 ²	2,374,308,376

NOTE.—The statistics in this table are averages computed from the twelve monthly returns.

¹ Includes the deposits of Dominion and Provincial Governments.

² Includes amounts deposited elsewhere than in Canada, not included in deposits prior to 1901.

48.—Historical Summary showing Development of the Canadian Banking Business, calendar years 1867-1923—concluded.

Calendar Years.	ASSETS.					Percentage of Liabilities to the Public to Total Assets.
	Specie and Dominion Notes (including Deposits in Central Gold Reserves 1913-1923.)	Dominion and Provincial Government Securities.	Municipal Securities in Canada and Public Securities elsewhere than in Canada.	Total Loans.	Total Assets.	
	\$	\$	\$	\$	\$	
1867 (6 mos.)....	-	-	-	53,889,703	78,294,670	55-27
1868.....	-	-	-	52,299,050	79,860,976	56-53
1869.....	-	-	-	56,433,953	86,283,693	59-04
1870.....	-	-	-	66,276,961	103,197,103	63-65
1871.....	-	-	-	84,799,841	125,273,631	64-06
1872.....	-	-	-	106,744,665	148,862,445	61-04
1873.....	-	-	-	119,274,317	166,056,595	56-60
1874.....	-	-	-	131,680,111	187,921,031	61-95
1875.....	-	-	-	136,029,307	186,255,330	56-17
1876.....	-	-	-	127,621,577	183,499,801	54-29
1877.....	-	-	-	125,681,658	181,019,194	55-14
1878.....	-	-	-	119,682,659	175,450,274	54-45
1879.....	-	-	-	113,485,108	173,548,490	55-75
1880.....	-	-	-	102,166,115	184,276,190	60-69
1881.....	-	-	-	116,953,497	200,613,879	63-39
1882.....	-	-	-	140,077,194	227,426,835	65-86
1883.....	-	-	-	143,944,957	228,084,650	63-98
1884.....	-	-	-	130,490,053	219,998,642	62-50
1885.....	-	-	-	126,827,792	219,147,080	63-32
1886.....	-	-	-	132,833,313	228,061,872	64-44
1887.....	-	-	-	139,753,755	230,393,072	64-98
1888.....	-	-	-	141,002,373	243,504,164	67-35
1889.....	-	-	-	149,958,980	253,789,803	68-18
1890.....	-	-	-	153,301,335	254,546,329	68-05
1891.....	-	-	-	171,082,677	269,307,032	69-56
1892.....	17,794,201	-	-	193,455,883	291,635,251	71-34
1893.....	19,714,648	-	-	206,623,042	302,696,715	71-75
1894.....	22,371,954	-	-	204,124,939	307,520,020	71-87
1895.....	22,992,872	-	-	203,730,800	316,536,510	72-50
1896.....	22,318,627	-	-	213,211,996	320,937,643	72-39
1897.....	24,178,151	-	-	212,014,635	341,163,505	74-06
1898.....	25,330,564	-	-	223,806,320	370,583,991	75-86
1899.....	26,682,970	-	-	251,467,076	412,504,768	77-24
1900.....	29,047,382	-	-	279,279,761	459,715,065	77-52
1901.....	32,088,501	11,331,385	13,031,176	388,299,888	531,829,324	78-97
1902.....	35,478,598	9,804,998	14,487,632	430,662,670	585,761,109	79-72
1903.....	42,510,574	11,186,607	14,896,472	472,019,689	641,543,226	79-11
1904.....	50,307,871	10,705,202	15,560,145	509,011,993	695,417,756	79-67
1905.....	56,690,323	8,833,626	18,820,985	559,814,918	767,490,183	80-61
1906.....	61,287,581	9,360,614	20,460,670	655,869,879	878,512,076	81-25
1907.....	70,550,520	9,546,927	21,198,817	709,975,274	945,685,708	81-32
1908.....	80,654,276	9,522,743	19,788,937	670,170,833	941,290,619	80-96
1909.....	95,558,461	11,653,798	21,707,363	762,195,546	1,067,007,534	82-72
1910.....	104,735,626	14,741,621	21,696,987	870,100,890	1,211,452,351	84-13
1911.....	120,146,690	10,637,580	22,848,170	926,909,616	1,303,131,260	84-23
1912.....	132,853,405	9,388,968	22,586,119	1,061,843,991	1,470,065,478	84-36
1913.....	141,872,884	9,995,237	23,183,162	1,111,993,263	1,530,093,671	84-14
1914.....	165,845,957	11,697,603	22,707,738	1,101,880,924	1,555,676,395	84-20
1915.....	208,438,854	12,814,898	31,553,091	1,066,252,854	1,596,424,643	84-75
1916.....	230,113,831	29,717,007	117,902,686	1,135,866,531	1,839,286,709	86-82
1917.....	265,389,567	131,078,854	183,341,125	1,219,161,252	2,111,559,555	88-38
1918.....	351,762,841	162,821,026	252,936,568	1,339,660,669	2,432,331,418	89-81
1919.....	370,775,723	214,621,625	256,270,715	1,552,971,202	2,754,568,118	90-60
1920.....	367,165,054	220,356,255	210,826,991	1,935,449,637	3,064,133,843	90-86
1921.....	335,081,032	166,688,146	156,552,503	1,781,184,115	2,841,782,079	89-96
1922.....	305,522,425	198,826,031	90,131,491	1,643,643,443	2,638,776,483	89-62
1923.....	291,999,879	242,292,315	112,642,627	1,606,932,483	2,643,773,986	92-16

NOTE.—The statistics in this table are averages computed from the twelve monthly returns in each year.

Bank Assets and Liabilities.—Tables 49 and 50 show the assets and liabilities of Canadian chartered banks for the four years 1920 to 1923, the figures being yearly averages of the totals shown in the monthly statements to the Minister of Finance. Attention may be drawn to the reduction by almost \$46,000,000 of quick assets in 1923, including the decrease by almost \$34,000,000 of balances due from foreign banks and correspondents, the increase of \$43,000,000 in the holdings of Canadian government and provincial government securities, and the call loans outside of Canada, which show an increase of almost \$20,000,000. The increase in the amount of "other liquid assets" of some \$87,000,000 served to balance the decreases in "quick assets" and "other assets" and to show an increase in total assets over the previous year of \$4,997,503. The table of liabilities shows fewer changes from 1922 figures. Balances due to the Dominion government are reduced by some \$33,000,000, while demand deposits in Canada increased by almost \$21,000,000 and total liabilities showed an increase of almost \$10,000,000. Changes in the character and volume of assets and liabilities may, on the whole, be ascribed to continued deflation throughout the country, and to the re-establishment of normal banking practice.

49.—Assets of Chartered Banks for calendar years 1920-1923.

Assets.	1920.	1921.	1922.	1923.
Quick Assets—	\$	\$	\$	\$
Current gold and subsidiary coin.....	81,471,916	80,671,931	80,776,592	68,920,115
Dominion notes.....	177,990,416	174,802,401	170,393,300	165,581,398
Deposit with Minister of Finance for security of note circulation.....	6,122,715	6,417,287	6,493,593	6,662,665
Deposit in central gold reserves.....	107,702,722	79,606,700	54,352,533	57,498,366
Notes of other banks.....	45,640,095	51,267,964	40,571,207	37,441,300
Cheques of other banks.....	130,277,410	111,726,865	104,878,651	111,387,509
Deposits made with, and balances due from other banks in Canada.....	5,697,820	6,179,469	5,243,496	5,008,577
Due from banks and banking correspondents in the United Kingdom.....	17,669,923	12,857,830	10,309,844	8,090,470
Due from banks and banking correspondents elsewhere than in Canada and the United Kingdom.....	62,097,682	60,885,266	87,972,048	54,358,289
Total Quick Assets.....	634,670,699	584,415,713	560,991,264	514,948,689
Other Liquid Assets—				
Dominion Government and Provincial Government securities.....	120,356,255	166,688,146	198,826,031	242,292,315
Canadian municipal securities, and British, foreign and colonial public securities other than Canadian.....	210,826,991	156,552,503	90,131,491	112,642,627
Railway and other bonds, debentures and stocks.....	48,031,228	45,728,878	43,208,758	46,857,264
Call and short (not exceeding thirty days) loans in Canada on stocks, debentures and bonds.....	118,956,035	109,542,625	101,320,268	98,874,726
Call and short (not exceeding thirty days) loans elsewhere than in Canada.....	200,098,050	172,137,325	178,457,564	198,047,516
Total Other Liquid Assets.....	698,268,559	650,649,477	611,944,112	698,714,448
Other Assets—				
Other current loans and discounts in Canada.....	1,342,763,470	1,246,018,266	1,122,255,707	1,052,132,479
Other current loans and discounts elsewhere than in Canada.....	186,891,995	156,571,063	149,586,461	161,594,278
Loans to the Government of Canada.....	—	158,750	—	—
Loans to provincial governments.....	13,945,219	12,806,347	9,556,612	13,158,705
Loans to cities, towns, municipalities and school districts.....	67,839,214	77,140,465	74,627,370	73,681,116
Overdue debts.....	4,952,320	6,809,940	7,839,461	9,443,664
Real estate other than bank premises.....	4,781,361	4,357,257	4,977,208	6,191,758
Mortgages on real estate sold by the bank.....	2,679,141	3,070,228	3,682,344	3,664,553
Bank premises at not more than cost, less amounts (if any) written off.....	58,111,876	65,808,576	70,909,881	70,073,851
Liabilities of customers under letters of credit as per contra.....	46,054,619	30,079,462	18,358,731	26,146,908
Other assets not included under the foregoing heads.....	3,175,370	3,896,535	4,047,332	14,023,537
Total Other Assets.....	1,731,194,585	1,606,716,889	1,465,841,107	1,430,110,849
Grand Total Assets.....	3,064,133,843	2,841,782,079	2,638,776,483	2,643,773,986

NOTE.—The statistics in this table are averages computed from the twelve monthly returns in each year.

50.—Liabilities of Chartered Banks for calendar years 1920-1923.

Liabilities.	1920.	1921.	1922.	1923.
	\$	\$	\$	\$
Liabilities to the Public—				
Notes in circulation.....	228,800,379	194,621,710	166,466,109	170,420,792
Balance due to Dominion Government after deducting advances for credits, pay lists, etc.....	188,360,129	109,405,020	83,669,096	50,581,598
Balances due to provincial governments.....	21,384,185	28,794,562	28,833,208	34,311,455
Deposits by the public payable on demand in Canada.....	653,862,869	551,914,643	502,781,234	523,170,930
Deposits by the public payable after notice or on a fixed day in Canada.....	1,239,308,076	1,289,317,063	1,191,637,001	1,197,277,065
Deposits elsewhere than in Canada.....	335,164,532	285,125,448	314,076,484	302,265,063
Deposits made by and balances due to other banks in Canada.....	11,830,949	11,756,766	9,931,819	12,832,965
Due to banks and banking correspondents in the United Kingdom.....	7,057,506	8,078,047	9,775,026	6,035,201
Due to banks and banking correspondents elsewhere than in Canada and the United Kingdom.....	40,380,320	32,532,361	28,762,762	33,381,652
Bills payable.....	8,155,523	11,494,432	7,484,191	7,779,149
Acceptances under letters of credit.....	46,054,619	30,079,462	18,358,731	26,146,908
Liabilities not included under foregoing heads.....	3,709,611	3,304,676	3,046,993	10,105,599
Total Liabilities to the Public.....	2,784,068,698	2,556,454,190	2,364,822,637	2,374,308,376
Liabilities to Shareholders—				
Capital paid up.....	123,617,120	129,096,339	125,456,485	124,373,293
Amount of rest or reserve fund.....	128,756,690	134,104,030	129,627,270	126,441,667
Total Liabilities to Shareholders...	252,373,810	263,200,369	255,083,755	250,814,960
Grand Total Liabilities.....	3,036,442,508	2,819,654,559	2,619,906,412	2,625,123,336

NOTE.—The statistics in this table are averages computed from the twelve monthly returns in each year.

In Tables 51 and 52 bank assets and liabilities on Dec. 31, 1923, are given by individual banks, being classified, in addition, according to their nature and availability in meeting liabilities. The tables illustrate, in addition to the comparative volume of business done by the various banks, particular types of transactions carried on by the individual units in the system. It is significant evidence of the tendency to consolidation that the 16 banks for which statistics are given in these tables have since the date of the return been reduced to 12, Molsons Bank, the Banque Nationale, the Bank of Hamilton and the Sterling Bank having been absorbed by stronger institutions. For details see Table 62 of this section.

51.—Assets of each of the Chartered Banks of Canada, December 31, 1923.

Chartered Banks.	Current Gold and Subsidary Coin.	Dominion Notes.	Deposit in Central Gold Reserves.	Due from other Banks.	Securities.	Loans and Discounts.			Total Assets. ¹
						Call Loans in Canada.	Current Loans in Canada.	Call and Current Loans outside of Canada.	
	\$	\$	\$	\$	\$	\$	\$	\$	\$
Bank of Montreal.....	15,873,500	56,454,572	19,000,000	53,552,800	98,683,490	10,366,852	221,975,085	129,493,777	663,661,733
Bank of Nova Scotia.....	9,527,112	20,893,762	6,500,000	16,394,258	48,728,088	11,318,943	76,247,715	19,695,173	227,889,799
Bank of Toronto.....	996,840	5,428,140	2,650,000	5,777,276	21,271,023	10,277,145	46,418,897	—	99,752,991
Molson's Bank.....	586,432	3,934,339	1,500,000	6,185,907	9,726,045	4,576,052	39,754,871	—	73,261,454
Banque Nationale.....	380,557	1,597,544	2,550,000	3,505,810	11,543,953	489,199	22,930,888	—	52,864,167
Banque Provinciale du Canada.....	167,611	235,817	—	4,866,954	7,804,025	5,915,658	14,255,882	—	36,939,223
Union Bank of Canada.....	1,099,581	6,536,173	2,000,000	8,124,365	27,239,189	1,045,940	61,853,897	3,193,431	124,402,159
Canadian Bank of Commerce.....	9,200,544	16,738,298	10,300,000	28,606,637	58,956,972	26,858,794	163,015,413	46,839,638	407,453,016
Royal Bank of Canada.....	12,461,650	21,850,482	12,000,000	53,651,933	63,177,047	19,012,358	140,886,640	137,547,885	536,778,414
Dominion Bank.....	2,048,850	10,505,844	600,000	13,029,525	24,027,358	5,278,335	53,059,107	3,126,355	122,060,752
Bank of Hamilton ²	914,367	3,075,795	500,000	3,914,745	6,352,133	6,068,895	36,994,660	—	67,904,128
Standard Bank of Canada.....	1,166,112	3,502,101	1,200,000	5,151,316	11,009,970	2,958,458	38,183,209	100,000	68,605,462
Banque d'Hochelaga.....	557,428	2,695,504	2,300,000	5,553,208	11,609,497	6,380,614	34,770,421	—	71,593,450
Imperial Bank of Canada.....	1,995,005	9,689,248	4,502,533	11,998,744	15,250,317	4,893,345	54,202,710	7,000,000	122,453,883
Sterling Bank of Canada.....	74,634	1,084,082	—	967,206	11,177,611	86,803	5,049,934	—	21,009,663
Weyburn Security Bank.....	18,163	130,364	—	786,726	224,522	—	1,953,189	—	3,793,809
Total	57,068,386	164,352,065	65,602,533	222,067,500	426,871,240	115,527,321	1,911,612,518	346,996,259	2,700,424,163

¹Includes other assets. ² Now incorporated with Canadian Bank of Commerce.

52.—Liabilities of each of the Chartered Banks of Canada, December 31, 1923.

Chartered Banks.	Capital (paid up).	Reserves.	Notes in Circulation.	Due to Dominion and to Provincial Governments.	Deposits.			Due to Other Banks.	Total Liabilities. ¹
					Demand in Canada.	Notice in Canada.	Outside of Canada.		
	\$	\$	\$	\$	\$	\$	\$	\$	\$
Bank of Montreal.....	27,250,000	27,250,000	41,612,571	27,041,753	140,214,458	304,520,815	80,384,964	2,931,042	660,427,462
Bank of Nova Scotia.....	10,000,000	19,500,000	15,074,324	3,542,694	31,424,474	108,763,519	31,061,010	4,307,333	227,637,103
Bank of Toronto.....	5,000,000	6,000,000	7,195,653	3,864,290	26,143,166	46,404,550	—	2,730,509	98,282,631
Molson's Bank.....	4,000,000	5,000,000	5,290,304	471,911	16,403,746	39,595,169	—	531,344	72,740,378
Banque Nationale.....	2,999,570	400,000	6,038,550	3,197,944	5,764,221	26,980,889	6,883,452	139,960	52,772,220
Banque Provinciale du Canada.....	3,000,000	1,500,000	3,476,604	260,426	4,658,027	23,913,289	—	1,162	36,873,653
Union Bank of Canada.....	8,000,000	1,750,000	9,819,355	11,500,978	33,072,277	51,484,115	3,078,222	4,038,935	124,035,797
Canadian Bank of Commerce.....	15,000,000	15,000,000	24,179,343	21,945,964	104,617,770	162,362,494	42,992,091	7,732,308	404,518,361
Royal Bank of Canada.....	20,400,000	20,400,000	31,020,200	8,753,796	98,761,696	182,872,254	132,074,701	14,583,049	535,479,795
Dominion Bank.....	6,000,000	7,000,000	7,366,384	7,313,045	28,439,140	53,847,920	3,306,147	5,112,512	121,235,377
Bank of Hamilton ²	5,000,000	4,850,000	4,882,522	3,206,225	14,006,563	35,147,289	—	400,149	67,904,128
Standard Bank of Canada.....	4,000,000	2,750,000	5,162,295	4,258,710	15,321,692	33,269,695	—	2,783,980	67,648,926
Banque d'Hochelega.....	4,000,000	4,000,000	6,876,059	1,538,652	10,249,116	43,567,037	—	372,547	71,208,817
Imperial Bank of Canada.....	7,000,000	7,500,000	10,619,560	11,131,747	26,906,787	56,841,923	—	418,923	120,838,972
Sterling Bank of Canada.....	1,235,000	500,000	1,157,914	5,202,968	2,832,761	9,068,140	—	845,406	20,848,574
Weyburn Security Bank.....	524,500	225,000	475,187	64,453	1,023,864	1,398,032	—	19,641	3,793,809
Total	123,409,136	123,625,000	150,246,825	113,295,556	559,839,758	1,130,037,130	299,780,587	46,958,800	2,686,246,003

¹Includes other liabilities.²Now incorporated with Canadian Bank of Commerce.

Deposits, Loans and Discounts.—As an index of the course of banking business, of the nature of many transactions undertaken and of the general security of bank assets, loans and discounts are of great value. They illustrate clearly the channels into which a large proportion of the potential earning power of the banks is directed, and, in the comparison between investments made in lending operations inside and outside of Canada, as well as in the duration of loans, afford essential information regarding the conduct by a bank of one of its most important activities.

Bank deposits, to a large extent the product of lending operations, by which credit is advanced on security, followed by the deposit of the proceeds of a loan, are also of considerable importance, and, on account of their derivation, are one of the most valuable records of the volume of business done at any time. Actual deposits of cash are, of course, included with the amounts deposited after the granting of loans.

Tables 53 and 54, following, give the deposits and loans of Canadian chartered banks for the years 1919 to 1923. A further decrease from the 1921 figures of the volume of business done is made apparent in 1923 by a reduction in total deposits of about \$13,000,000 and in total loans of about \$37,000,000 from the 1922 figures.

53.—Deposits in Chartered Banks in Canada and elsewhere, for the calendar years 1919-1923.

Items.	1919.	1920.	1921.	1922.	1923.
	\$	\$	\$	\$	\$
Deposits by the public of Canada—					
Payable on demand.....	621,676,065	653,862,869	551,914,643	502,781,234	523,170,930
Payable after notice or on a fixed day.....	1,125,202,403	1,239,308,076	1,289,347,063	1,191,637,004	1,197,277,065
Deposits elsewhere than in Canada.....	238,731,784	335,164,532	285,125,448	314,076,484	302,265,063
Balances due to Dominion and Provincial Governments.....	203,818,633	209,744,315	138,199,582	112,502,308	84,893,053
Total Deposits.....	2,189,428,885	2,438,079,792	2,264,586,736	2,120,997,030	2,107,606,111

NOTE.—The statistics in this table are averages computed from monthly returns in each year.

54.—Loans of Chartered Banks in Canada and elsewhere, for the calendar years 1919-1923.

Items.	1919.	1920.	1921.	1922.	1923.
	\$	\$	\$	\$	\$
Call and short loans on stocks and bonds in Canada.....	96,673,179	118,956,035	109,542,625	101,320,268	98,874,726
Call and short loans elsewhere than in Canada.....	163,227,204	200,098,050	172,137,325	178,457,564	198,047,516
Current loans in Canada ¹	1,140,395,977	1,410,602,684	1,323,158,731	1,196,883,077	1,125,813,594
Current loans elsewhere than in Canada.....	140,200,101	186,891,995	156,571,063	149,586,461	161,594,278
Loans to governments.....	8,214,314	13,945,219	12,965,097	9,556,612	13,158,705
Overdue debts.....	4,260,427	4,952,320	6,809,274	7,839,461	9,443,664
Total Loans.....	1,552,971,202	1,935,446,303	1,781,184,115	1,643,643,443	1,606,932,483

NOTE.—The statistics in this table are averages computed from monthly returns in each year.

¹ Includes loans to cities, towns, municipalities and school districts.

Bank Reserves.—The Bank Act contains no specific provisions as to the amount of gold to be held against either note circulation or the general business of a bank. It requires, however, that 40 p.c. of whatever reserve a bank finds expedient to carry shall be in Dominion notes. A second provision instructs the Minister of Finance to arrange for the delivery of Dominion notes to any bank in exchange for specie. Thus the gold reserve against Dominion notes, to the extent that the notes are held by the banks, is reserve against banking operations, the Dominion Government being the custodian of the gold for the banks. The other cash element in bank reserves is specie in hand. In addition to this cash on hand, Canadian banks carry three other kinds of asset which are regarded as reserves, being funds more or less immediately available for the liquidation of liabilities. These are: (1) cash balances in banks outside of Canada; (2) call and short loans in New York (the favourite call loan market); and (3) readily marketable securities. These are shown, together with net liabilities, in Table 55. In Table 56 the ratio to net liabilities of each element of the reserve is shown.

55.—Bank Reserves, with Liabilities, 1892-1923.

Years.	Specie and Dominion Notes.	Cash Due from			Call and short loans elsewhere than in Canada.
		Banks in the United Kingdom.	Banks elsewhere than in Canada and United Kingdom.	Total.	
	\$	\$	\$	\$	\$
1892.....	17,794,201	2,058,538	20,728,669	22,787,207	—
1893.....	19,714,648	2,651,533	17,318,101	19,969,634	—
1894.....	22,371,954	3,439,354	18,904,416	22,343,770	—
1895.....	22,992,872	4,915,458	23,183,161	28,098,619	—
1896.....	22,318,627	7,147,788	17,207,798	24,355,586	—
1897.....	25,178,151	11,149,437	22,060,471	33,209,908	—
1898.....	25,330,564	11,078,459	21,849,137	32,927,596	—
1899.....	26,682,970	11,872,548	24,136,270	36,008,818	—
1900.....	29,047,382	6,972,195	15,443,217	22,415,412	28,228,469 ¹
1901.....	32,088,501	5,598,939	12,811,524	18,410,463	40,020,238
1902.....	35,478,598	6,598,159	13,519,799	20,117,958	46,162,659
1903.....	42,510,574	5,638,954	14,192,232	19,831,186	38,025,662
1904.....	50,307,871	7,523,615	16,817,357	24,340,972	41,212,007
1905.....	56,590,323	9,960,560	19,201,939	29,162,499	51,452,955
1906.....	61,287,581	8,877,979	16,801,119	25,679,098	59,363,639
1907.....	70,550,520	6,027,157	15,363,728	21,390,885	52,907,513
1908.....	80,654,276	9,828,186	30,822,761	40,650,947	60,764,075
1909.....	95,568,461	10,311,864	31,779,144	42,091,008	119,728,263
1910.....	104,735,696	18,892,833	28,301,602	47,194,435	112,777,530
1911.....	120,146,690	21,122,092	29,695,985	50,818,077	91,097,704
1912.....	132,853,405	21,338,926	28,894,103	50,233,029	105,718,070
1913.....	135,267,623	13,329,642	28,238,329	41,567,971	98,602,151
1914.....	159,775,124	12,230,533	36,992,958	49,163,491	112,438,896
1915.....	200,113,021	20,824,559	43,781,939	64,606,498	118,896,692
1916.....	207,797,164	24,025,192	72,923,228	96,948,420	164,786,760
1917.....	210,475,400	17,885,648	53,021,952	70,907,600	157,430,643
1918.....	256,656,174	10,973,006	47,419,961	58,393,567	162,233,308
1919.....	257,429,889	12,359,426	50,904,693	63,264,119	163,227,204
1920.....	259,462,332	17,669,923	62,100,182	79,770,105	200,098,050
1921.....	255,474,332	12,857,830	60,885,266	73,745,346	172,137,325
1922.....	251,169,892	10,309,844	87,972,048	98,279,642	178,457,564
1923.....	234,501,513	8,090,470	54,358,289	62,448,759	198,047,516

NOTE.—The statistics in this table are averages computed from monthly returns in each year.

¹ Average of six months, July to Dec., 1900.

55.—Bank Reserves, with Liabilities, 1892-1923—concluded.

Years.	Securities.				Total Reserves.	Net Liabilities. ¹
	Dominion and Provincial Government Securities.	Canadian municipal, British, Foreign and Colonial, other than Canadian.	Railway and other Bonds.	Total.		
	\$	\$	\$	\$	\$	\$
1892.....	3,173,714	7,709,634	7,060,065	17,943,413	58,524,821	200,590,342
1893.....	3,221,223	9,223,577	5,919,928	18,364,728	58,049,010	209,917,600
1894.....	3,152,962	10,634,982	7,893,695	21,681,639	66,397,363	214,163,371
1895.....	2,792,147	9,423,850	9,566,175	21,782,172	72,873,663	222,531,570
1896.....	2,802,821	9,310,414	11,505,439	23,618,674	70,292,887	225,090,083
1897.....	3,049,525	12,559,340	13,728,645	29,337,510	87,725,569	244,627,721
1898.....	4,898,081	16,529,414	17,241,967	38,669,462	96,927,622	271,451,376
1899.....	4,952,525	16,622,875	15,023,469	36,598,869	99,290,657	307,537,537
1900.....	8,163,571	14,364,547	19,561,005	42,089,123	121,780,386	344,672,898
1901.....	11,331,385	13,031,176	30,440,258	54,802,810	145,322,021	405,915,468
1902.....	9,804,998	14,487,633	34,859,390	59,152,021	160,911,236	451,052,607
1903.....	11,186,607	14,896,472	37,800,893	63,883,972	164,251,394	489,439,303
1904.....	10,705,202	15,560,146	38,779,477	65,044,825	180,905,675	534,147,781
1905.....	8,833,627	18,820,985	39,974,520	67,629,132	204,834,909	595,027,264
1906.....	9,360,614	20,460,625	41,125,898	70,947,137	217,277,455	684,185,650
1907.....	9,546,760	21,198,817	41,239,589	71,985,166	216,834,084	737,505,039
1908.....	9,522,743	19,788,937	42,651,006	71,962,686	254,031,984	726,443,676
1909.....	11,653,798	21,707,363	50,783,614	84,144,775	341,522,507	844,098,072
1910.....	14,741,621	21,696,987	56,194,734	92,633,342	357,341,003	974,731,187
1911.....	10,637,580	22,848,170	60,909,240	94,394,990	356,457,461	1,044,712,367
1912.....	9,388,968	22,586,119	64,080,763	96,055,850	384,860,354	1,178,577,787
1913.....	9,995,237	23,183,161	70,713,075	103,891,473	379,329,682	1,222,752,292
1914.....	11,697,603	22,707,738	68,636,267	103,041,608	424,418,919	1,251,372,615
1915.....	12,814,898	31,553,091	74,020,538	118,388,527	502,004,738	1,298,018,989
1916.....	29,717,007	117,902,686	68,386,482	216,006,175	685,538,519	1,520,438,686
1917.....	131,078,854	183,341,125	58,958,908	373,378,887	812,192,530	1,771,264,882
1918.....	162,821,026	252,936,568	56,103,418	471,861,012	949,144,061	2,071,307,749
1919.....	214,621,625	256,270,715	54,429,301	525,321,641	1,009,242,853	2,363,044,215
1920.....	120,356,255	210,826,991	48,031,228	379,214,474	918,544,961	2,608,151,193
1921.....	166,688,146	156,552,503	45,728,878	368,969,527	870,324,280	2,393,459,361
1922.....	198,826,031	90,131,491	43,208,758	332,166,280	860,073,353	2,219,372,799
1923.....	242,292,315	112,642,627	46,857,264	401,792,206	896,789,994	2,222,479,569

NOTE.—The statistics in this table are averages computed from monthly returns in each year.

¹ Net liabilities are obtained by deducting from total liabilities, as shown in Table 49, the items "notes of other banks," "cheques on other banks," "loans to other banks in Canada, secured, including bills rediscounted," which represent indebtedness within the system and are counterbalanced by credits within the system.

56.—Ratio of Bank Reserves to Net Liabilities, 1892-1923.

Years.	Cash on hand.	Cash due from banks outside of Canada.	Call and short loans else- where than in Canada.	Securities.	Total Reserves.
	p.c.	p.c.	p.c.	p.c.	p.c.
1892.....	8.8	11.3	—	8.9	29.0
1893.....	9.4	9.5	—	8.7	27.6
1894.....	10.4	10.4	—	10.1	30.9
1895.....	10.4	12.6	—	9.8	32.8
1896.....	9.9	10.8	—	10.5	31.2
1897.....	10.3	13.6	—	11.9	35.8
1898.....	9.3	12.1	—	14.2	35.6
1899.....	8.7	11.7	—	11.8	32.2
1900.....	8.4	6.5	—	12.2	27.1
1901.....	8.0	4.5	10.0	13.5	36.0
1902.....	7.9	4.4	10.2	13.1	35.6
1903.....	8.9	4.0	7.7	13.0	33.6
1904.....	9.4	4.5	7.7	12.1	33.7
1905.....	9.5	4.9	8.6	11.3	34.3
1906.....	8.9	3.7	8.7	10.4	31.7
1907.....	9.5	2.9	7.2	9.7	29.3
1908.....	11.1	5.5	8.3	9.9	34.8
1909.....	11.3	5.0	14.2	9.9	40.4
1910.....	10.7	4.8	11.5	9.5	36.5
1911.....	11.5	4.8	8.7	9.0	34.0
1912.....	11.3	4.3	8.9	8.1	32.5
1913.....	11.1	3.4	8.1	8.5	31.1
1914.....	12.8	3.9	9.0	8.2	33.9
1915.....	15.4	5.0	9.2	9.1	38.7
1916.....	13.7	6.4	10.8	14.2	45.1
1917.....	11.9	4.0	8.9	21.1	45.9
1918.....	12.4	2.8	7.8	22.8	45.8
1919.....	10.9	2.7	6.9	22.2	42.7
1920.....	9.9	3.1	7.7	14.5	35.2
1921.....	10.7	3.1	7.2	15.4	36.4
1922.....	11.3	4.4	8.0	15.0	38.7
1923.....	10.6	2.8	8.9	18.1	40.4

NOTE.—The statistics in this table are based upon the averages of the monthly returns in each year. See Table 55 for actual amounts.

Chartered Banks in Canada.—During the period from 1881 to 1901, the number of chartered banks doing business in Canada under the Bank Act remained almost the same, 36 in 1881 and 1891 and 34 in 1901, but during the present century there has been in banking, as in industry, an era of amalgamations, the number of chartered banks having dropped to 25 in 1913 and to 12 in Jan., 1925. That this has been far from involving a curtailment of banking facilities is seen in Table 48, which shows the development of the banking business since 1867, and in Table 57, which compares the number of branch banks existing in Canada at different periods, showing a growth from 123 at Confederation to 4,227 at December 31, 1923, besides 195 branches in other countries. Table 58 gives the number of branches of the various banks, by provinces, as at December 31, 1923, while Table 59 contains the statistics of branches of Canadian banks doing business outside of Canada, an extension of Canadian banking (more especially to Newfoundland and the West Indies) which has proceeded very rapidly in recent years.

57.—Number of Branches of Chartered Banks in Canada, by Provinces, 1868, 1902, 1905, 1916 and 1923.

Provinces.	1868.	1902.	1905.	1916. ¹	1923. ¹
Prince Edward Island.....	—	9	10	17	30
Nova Scotia.....	5	89	101	111	150
New Brunswick.....	4	35	49	82	128
Quebec.....	12	137	196	784	1,193
Ontario.....	100	349	549	1,154	1,443
Manitoba.....	—	52	95	200	271
Saskatchewan.....	—	30	87	413	481
Alberta.....	—	—	—	247	320
British Columbia.....	2	46	55	187	208
Yukon.....	—	—	3	3	3
Total.....	123	747	1,145	3,198	4,227

¹ Includes sub-agencies for receiving deposits for the banks employing them.

58.—Number and Location of Branches of Canadian Chartered Banks, as at December 31, 1923.

Chartered Banks.	P. E. Island.	Nova Scotia.	New Brun- swick.	Quebec.	Ontario.	Manitoba.
Bank of Montreal.....	1	15	15	80	187	40
Bank of Nova Scotia.....	9	40	39	19	129	9
Bank of Toronto.....	—	—	—	11	88	11
Molsons Bank.....	—	—	—	45	63	2
Banque Nationale.....	—	—	1	104	2	—
Banque Provinciale du Canada.....	3	—	17	86	17	—
Union Bank of Canada.....	—	2	3	10	86	58
Canadian Bank of Commerce.....	7	24	7	81	199	60
Royal Bank of Canada.....	8	65	25	58	192	36
Dominion Bank.....	—	—	1	5	85	11
Standard Bank of Canada.....	—	—	1	1	113	6
Banque d'Hochelega.....	—	—	—	129	19	11
Imperial Bank of Canada.....	—	—	—	2	106	9
Sterling Bank of Canada.....	—	—	—	1	64	7
Weyburn Security Bank.....	—	—	—	—	—	—
Total.....	28	146	109	632	1,350	260
Sub-agencies (Provincial).....	2	4	19	561	93	11
Grand Total.....	30	150	128	1,193	1,443	271

Chartered Banks.	Saskat- chewan.	Alberta.	British Colum- bia.	Yukon.	Other Countries.	Provin- cial Sub- agencies.	Total.
Bank of Montreal.....	63	68	48	1	16	27	561
Bank of Nova Scotia.....	15	4	5	—	37 ¹	24	330
Bank of Toronto.....	33	13	5	—	—	4	165
Molsons Bank.....	—	3	3	—	—	8	124
Banque Nationale.....	—	—	—	—	1	234	342
Banque Provinciale du Canada.....	—	—	—	—	—	192	315
Union Bank of Canada.....	95	62	9	—	2	13	340
Canadian Bank of Commerce.....	100	65	61	2	16	24	646
Royal Bank of Canada.....	79	37	51	—	121 ²	13	685
Dominion Bank.....	5	5	3	—	2	1	118
Standard Bank of Canada.....	16	22	1	—	—	—	160
Banque d'Hochelega.....	10	8	—	—	—	165	342
Imperial Bank of Canada.....	32	27	17	—	—	—	193
Sterling Bank of Canada.....	4	—	—	—	—	—	76
Weyburn Security Bank.....	25	—	—	—	—	—	25
Total.....	477	314	203	3	195	705	4,422
Sub-agencies (Provincial).....	4	6	5	—	—	—	—
Grand Total.....	481	320	208	3	195	—	4,422

¹ Includes one sub-agency.

² Includes one auxiliary company.

59.—Number of Branches of Canadian Chartered Banks in other Countries, with their Location, December 31, 1923.

Banks and Location.	Branches.	Banks and Location.	Branches.
	No.		No.
Bank of Montreal—		The Canadian Bank of Commerce—con.	
Newfoundland.....	6	Jamaica.....	1
Great Britain.....	2	Mexico.....	1
France.....	1	Newfoundland.....	3
United States.....	4	St. Pierre and Miquelon.....	1
Mexico.....	3	Trinidad.....	2
		United States.....	4
The Bank of Nova Scotia—		The Royal Bank of Canada—	
Newfoundland.....	13	Newfoundland.....	6
Jamaica.....	11	Cuba.....	65
Cuba.....	4	Porto Rico, etc.....	15
Porto Rico.....	2	British West Indies.....	18
Dominican Republic.....	3	Central and South America.....	13
United States.....	3	United States.....	1
England.....	1	Spain.....	1
La Banque Nationale—		Great Britain.....	1
France.....	1		
Union Bank of Canada—		Auxiliary—	
England.....	1	The Royal Bank of Canada (France),	
United States.....	1	Paris.....	1
The Canadian Bank of Commerce—		The Dominion Bank—	
Barbados.....	1	United States.....	1
Brazil.....	1	Great Britain.....	1
Cuba.....	1		
Great Britain.....	1	Total.....	195

¹ Includes one sub-agency.

Clearing House Transactions.—The appended table shows for the years 1919 to 1923 the total volume of clearings in the clearing houses of Canada. These figures, it may be added, represent not only actual city clearings but exchanges between numerous rural branches of the banks in each district.

60.—Amount of Exchanges of the Clearing Houses of Chartered Banks in Canada for the calendar years 1919-1923.

Name of Clearing House.	1919.	1920.	1921.	1922.	1923.
	\$	\$	\$	\$	\$
Brandon.....	36,922,771	41,398,339	39,282,713	33,077,338	30,970,260
Brantford.....	58,087,607	76,113,949	62,020,507	54,067,486	52,921,931
Calgary.....	355,011,589	438,073,277	335,465,202	263,240,201	272,438,886
Edmonton.....	233,066,784	294,873,361	260,288,619	234,211,250	217,371,339
Fort William.....	41,767,192	48,071,033	43,619,961	41,147,691	49,754,115
Halifax.....	241,200,194	254,677,402	181,802,598	160,112,236	152,328,563
Hamilton.....	306,370,966	380,733,960	297,932,727	283,272,009	301,554,611
Kingston.....			33,872,694	34,679,436	34,886,561
Kitchener.....	48,245,095	61,600,500	51,159,583	32,490,715	51,889,983
Lethbridge.....	38,179,536	45,989,987	35,350,739	31,069,140	31,976,083
London.....	163,826,856	192,157,969	161,956,960	147,787,996	151,868,946
Medicine Hat.....	24,317,350	27,803,580	21,927,687	17,707,369	17,688,504
Moncton.....		18,090,876	56,263,833	59,314,596	50,243,509
Montreal.....	6,251,781,893	7,109,189,038	5,720,258,173	5,093,943,172	5,463,105,775
Moose Jaw.....	86,447,626	94,584,910	74,739,761	64,035,266	63,910,782
New Westminster.....	28,696,806	36,435,337	30,735,069	27,367,207	29,251,758
Ottawa.....	472,691,921	515,006,228	404,237,674	370,775,449	353,699,360
Peterborough.....	41,376,004	50,639,788	44,295,516	37,100,117	39,376,920
Prince Albert.....					18,010,599
Quebec.....	290,983,483	364,589,362	302,491,518	284,684,618	303,116,299
Regina.....	210,898,989	231,070,268	203,659,640	184,919,431	190,195,987
St. John.....	153,134,927	176,671,887	147,301,169	142,488,125	111,395,039
Saskatoon.....	105,886,583	118,503,076	100,523,291	87,892,572	89,106,604
Sherbrooke.....	49,576,864	64,046,860	53,641,710	43,259,747	43,320,228
Toronto.....	4,251,644,303	5,410,214,802	5,104,893,766	4,974,949,873	5,501,568,205
Vancouver.....	654,913,208	867,901,614	708,205,932	682,964,537	750,633,482
Victoria.....	123,351,345	145,707,146	122,416,244	105,775,654	105,229,802
Windsor.....	95,791,923	171,282,078	162,268,354	170,789,802	176,443,115
Winnipeg.....	2,316,724,063	3,015,704,299	2,682,441,103	2,563,938,701	2,528,311,969
Total.....	16,680,885,978	20,251,135,926	17,443,051,743	16,247,121,737	17,332,632,215

Bank Amalgamations and Insolvencies.—Two tables are appended which may be of interest to students of Canadian banking history. The first, showing bank insolvencies since 1867, gives the capital paid up, reserve, assets and liabilities of insolvent banks, and shows also the payments p.c. to noteholders and depositors. In the majority of cases, both these classes of creditors have received payment in full. The table of bank absorptions gives the dates of absorption of the 33 banks which were incorporated with other institutions between 1867 and 1925.

61.—Canadian Bank Insolvencies since 1867.

Name.	Date of Suspension.	Paid up Capital.	Reserve Fund.	Liabilities.	Assets.	Paid to Noteholders.	Paid to Depositors.
		\$	\$	\$	\$	p.c.	p.c.
Commercial Bank of N.B.	— 1868	600,000	—	671,420	1,222,454	100	100
Bank of Acadia ¹	April, 1873	100,000	—	106,914	213,346	—	—
Metropolitan Bank.....	Oct., 1876	800,170	—	293,379	779,225	100	100
Mechanics' Bank.....	May, 1879	194,794	—	547,238	721,155	57½	57½
Bank of Liverpool.....	Oct., 1879	370,548	—	136,480	207,877	100	96½
Consolidated Bank of Can.	Aug., 1879	2,080,920	—	1,794,249	3,077,202	100	100
Stadacona Bank.....	July, 1879	991,890	—	341,500	1,355,675	100	100
Bank of Prince Edward I'd.	Nov. 28, 1881	120,000	45,000	1,108,000	953,244	59½	59½
Exchange Bank of Canada.	Sept., 1883	500,000	300,000	2,868,884	3,779,493	100	66½
Maritime Bank of Dom. of Canada.	Mar., 1887	321,900	60,000	1,409,482	1,825,993	100	100½
Pictou Bank.....	Sept., 1887	200,000	—	74,364	277,017	100	100
Bank of London in Canada.	Aug., 1887	241,101	50,000	1,031,280	1,310,675	100	100
Central Bank of Canada.....	Nov., 1887	500,000	45,000	2,631,378	3,231,518	100	99½
Federal Bank.....	Jan., 1888	1,250,000	150,000	3,449,499	4,869,113	100	100
Commercial Bank of Manitoba.	June 30, 1893	552,650	50,000	1,341,251	1,951,151	100	100
Banque du Peuple.....	July 15, 1895	1,200,000	600,000	7,761,209	9,533,537	100	75½
Banque Ville Marie.....	July 25, 1899	479,620	10,000	1,766,841	2,267,516	100	17½
Bank of Yarmouth.....	Mar. 6, 1905	300,000	35,000	388,660	723,660	100	100
Ontario Bank.....	Oct. 13, 1906	1,500,000	700,000	15,272,271	15,920,307	100	100
Sovereign Bank of Canada.	Jan. 18, 1908	3,000,000	—	16,174,408	19,218,746	100	100
Banque de St. Jean.....	April 28, 1908	316,386	10,000	560,781	326,118	100	30½
Banque de St. Hyacinthe.	Jan. 24, 1908	331,235	75,000	1,172,630	1,576,443	100	100
St. Stephen's Bank.....	Mar. 10, 1910	200,000	55,000	549,830	818,271	100	100
Farmers Bank.....	Dec. 19, 1910	567,579	—	1,997,041	2,616,683	100	1
Bank of Vancouver.....	Dec. 14, 1914	445,188	—	912,137	1,532,786	100	1
Home Bank of Canada.....	Aug. 17, 1923	1,960,591	550,000	24,889,049	27,431,709	100	1

¹ Liquidation incomplete.

² This bank was only in existence for 3 months and 26 days. Only some of its notes were redeemed on its re-opening for a few days. The Dominion Government received 25 cents on the dollar on several thousand dollars worth of the notes which it held.

62.—Bank Absorptions in Canada since 1867.¹

Purchasing Bank.	Bank Absorbed.	Date. ²
Bank of Montreal.....	Exchange Bank, Yarmouth, N.S.....	Aug. 13, 1903
	People's Bank of Halifax, N.S.....	June 27, 1905
	Ontario Bank.....	Oct. 13, 1906
	People's Bank of New Brunswick.....	April 15, 1907
	Bank of British North America.....	Oct. 12, 1918
	Merchants Bank.....	Mar. 20, 1922
	Molson's Bank.....	Jan. 20, 1925
Canadian Bank of Commerce.....	Gore Bank.....	May 19, 1870
	Bank of British Columbia.....	Dec. 31, 1900
	Halifax Banking Co.....	May 30, 1903
	Merchants Bank of P.E.I.....	May 31, 1906
	Eastern Townships Bank.....	Feb. 29, 1912
	Bank of Hamilton.....	Dec. 31, 1923
Bank of Nova Scotia.....	Union Bank of P.E.I.....	Oct. 1, 1883
	Bank of New Brunswick.....	Feb. 15, 1913
	The Metropolitan Bank.....	Nov. 14, 1914
	The Bank of Ottawa.....	April 30, 1919
Royal Bank of Canada.....	Union Bank of Halifax.....	Nov. 1, 1910
	Traders Bank of Canada.....	Sept. 3, 1912
	Quebec Bank.....	Jan. 2, 1917
	Northern Crown Bank.....	July 2, 1918

¹ The purchasing banks named in the latter part of the table are no longer in business.

² Dates given since 1900 are of the Orders in Council authorizing the absorption.

62.—Bank Absorptions in Canada since 1867¹—concluded.

Purchasing Bank.	Bank Absorbed.	Date. ²
Imperial Bank of Canada.....	Niagara District Bank.....	June 21, 1875
Standard Bank of Canada.....	Western Bank of Canada.....	Feb. 13, 1909
Union Bank of Canada.....	Sterling Bank of Canada.....	Dec. 31, 1924
Banque d'Hochelaga.....	United Empire Bank.....	Mar. 31, 1911
	Banque Nationale.....	April 30, 1924
<hr/>		
Bank of New Brunswick.....	Summerside Bank.....	Sept. 12, 1901
Merchants Bank of Canada.....	Merchants Bank.....	Feb. 22, 1868
	Commercial Bank of Canada.....	June 1, 1868
Union Bank of Halifax.....	Commercial Bank of Windsor.....	Oct. 31, 1902
Northern Crown Bank.....	The Northern Bank.....	July 2, 1908
	Crown Bank of Canada.....	July 2, 1908
Home Bank of Canada.....	La Banque Internationale du Canada.....	April 15, 1913

¹ The purchasing banks named in the latter part of the table are no longer in business.

² Dates given since 1900 are of the Orders in Council authorizing the absorption.

Government and Other Savings Banks.¹—There are two classes of Dominion Government Savings Banks in Canada, the Post Office Savings Banks, under the Post Office Department, and the Dominion Government Savings Banks, attached to the Department of Finance. The former were established under the Post Office Act of 1867 (31 Vict., c. 10) in order "to enlarge the facilities now available for the deposit of small savings, to make the Post Office available for that purpose, and to give the direct security of the Dominion to every depositor for repayment of all money deposited by him, together with the interest due thereon." On Mar. 31, 1924, the number of offices authorized to transact business was 1,345, and the number of savings accounts was 81,104. Statistics of deposits are given in Table 64. The Government Savings Banks proper, under the authority of the Finance Department, are established in the leading cities of Canada under the management of the Assistant Receiver-General, and in other places in the provinces of Nova Scotia and New Brunswick, under managers appointed by the Governor in Council. Statistics of their deposits are given in Table 65, and for the two systems combined in Table 66.

Other Savings Banks.—The Montreal City and District Savings Bank, founded in 1846, and now operating under a charter granted in 1871, had a paid-up capital on July 31, 1924, of \$1,498,570, deposits of \$52,060,802, and total liabilities of \$52,699,008. Total assets amounted to \$55,993,291, including over \$39,000,000 of Dominion, provincial and municipal securities. The Caisse d'Economie de Notre Dame de Quebec, founded in 1848 under the auspices of the St. Vincent de Paul Society, incorporated by Act of the Canadian Legislature in 1855 and given a Dominion charter by 34 Victoria, c. 7, had on July 31, 1924, deposits of \$12,043,070, a paid-up capital of \$1,000,000 and an excess of assets over liabilities of \$2,082,436.

The co-operative people's banks of Quebec (130 in number) are also an important element in promoting thrift and assisting business in that province. Loans granted in 1922 numbered 13,367, amounting to \$2,891,092, a decrease from figures for 1921. Profits realized amounted to \$334,396.

¹ The system of Government of Ontario Savings Offices, established as sub-Treasury Offices of the Province, conducts a purely savings bank business, paying 3 p.c. on deposits, all of which are repayable on demand. The system has been in operation for about three years, during which time total deposits have grown to \$23,000,000 (Sept., 1924), number of depositors to between 90,000 and 100,000, and the number of offices to 15, mostly in the western sections of the province. The province effects a saving by utilizing deposits for governmental purposes, rather than procuring funds by means of bond issues.

A similar system is in operation in Manitoba, where 4 or 5 sub-Treasury Offices of the province had deposits of over \$10,000,000 in June, 1924.

Historical statistics of Post Office savings banks, of Dominion Government savings banks, of the Montreal City and District savings bank and of the Caisse d'Economie de Notre Dame de Quebec are given in Table 63.

63.—Deposits with Government and other Savings Banks,¹ June 30, 1868-1906, and March 31, 1907-1924.

Years.	Postal Savings Banks.	Dominion Government Savings Banks.	Other Savings Banks (Montreal City and District and Caisse d'Economie de Notre Dame de Quebec).	Total.	Amount per head of Population
	\$	\$	\$	\$	\$ cts.
1868.....	204,589	1,483,219	3,369,799	5,057,607	1 50
1869.....	856,814	1,594,525	3,960,818	6,412,157	1 88
1870.....	1,588,849	1,822,570	5,369,103	8,780,522	2 54
1871.....	2,497,260	2,072,037	5,766,712	10,336,009	2 96
1872.....	3,096,500	2,154,233	5,557,126	10,807,859	2 99
1873.....	3,207,052	2,958,170	6,768,662	12,933,884	3 53
1874.....	3,204,965	4,005,296	6,811,009	14,021,270	3 67
1875.....	2,926,090	4,245,091	6,611,416	13,782,597	3 55
1876.....	2,740,952	4,303,166	6,519,229	13,563,347	3 43
1877.....	2,639,937	4,830,694	6,054,456	13,525,087	3 37
1878.....	2,754,484	5,742,529	5,631,172	14,128,185	3 46
1879.....	3,105,191	6,102,492	5,494,164	14,701,847	3 55
1880.....	3,945,669	7,107,287	6,681,025	17,733,981	4 21
1881.....	6,208,227	9,628,445	7,685,888	23,522,560	5 44
1882.....	9,473,661	12,295,001	8,658,435	30,427,096	6 94
1883.....	11,976,237	14,242,870	8,791,045	35,010,152	7 90
1884.....	13,245,553	15,971,983	8,851,142	38,068,679	8 49
1885.....	15,090,540	17,888,536	9,191,895	42,170,971	9 29
1886.....	17,159,372	20,014,442	9,177,132	46,350,946	10 10
1887.....	19,497,750	21,334,525	10,092,143	50,924,418	10 98
1888.....	20,689,033	20,682,025	10,475,292	51,846,350	11 06
1889.....	23,011,423	19,994,934	10,761,061	53,717,419	11 33
1890.....	21,990,653	19,021,812	10,908,987	51,921,452	10 83
1891.....	21,738,648	17,661,378	10,982,232	50,382,258	10 40
1892.....	22,298,402	17,231,146	12,236,100	51,765,648	10 59
1893.....	24,153,194	17,696,464	12,823,836	54,673,494	11 08
1894.....	25,257,868	17,778,144	12,919,578	55,955,599	11 23
1895.....	26,805,542	17,644,956	13,128,483	57,578,981	11 44
1896.....	28,932,930	17,866,389	14,459,833	61,259,152	12 04
1897.....	32,380,829	16,554,147	15,025,564	63,960,540	12 44
1898.....	34,480,938	15,630,181	15,482,100	65,593,219	12 62
1899.....	34,771,605	15,470,110	15,893,567	66,135,282	12 57
1900.....	37,507,456	15,642,267	17,425,472	70,575,195	13 26
1901.....	39,950,813	16,098,146	19,125,097	75,174,056	13 95
1902.....	42,320,209	16,117,779	20,360,888	78,798,876	14 44
1903.....	44,255,326	16,515,802	21,241,993	82,013,121	14 83
1904.....	45,419,706	16,738,744	23,063,143	85,221,593	15 21
1905.....	45,368,321	16,649,136	25,050,966	87,068,423	15 53
1906.....	45,736,488	16,174,134	27,399,194	89,309,816	14 47
1907.....	47,453,228	15,088,584	28,359,618	90,901,430	14 42
1908.....	47,564,284	15,016,871	28,927,248	91,508,403	14 10
1909.....	45,190,484	14,748,436	29,867,973	89,806,893	13 41
1910.....	43,580,357	14,677,872	32,239,620	90,503,849	13 08
1911.....	43,330,579	14,673,752	34,770,386	92,774,717	12 87
1912.....	43,563,764	14,655,564	39,526,755	97,746,083	13 27
1913.....	43,728,942	14,411,541	40,133,351	97,273,834	12 92
1914.....	41,591,286	13,976,162	39,110,439	94,677,877	12 31
1915.....	39,995,406	14,006,158	37,817,474	91,819,038	11 68
1916.....	40,008,418	13,519,855	40,405,037	93,933,310	11 69
1917.....	42,582,479	13,633,610	44,139,978	100,355,067	12 27
1918.....	41,283,479	12,177,283	42,000,543	95,461,305	11 46
1919.....	41,654,960	11,402,098	46,799,877	99,856,935	11 78
1920.....	31,605,594	10,729,218	53,118,053	95,452,865	11 06
1921.....	29,010,619	10,150,189	58,576,775	97,737,583	11 12
1922.....	24,837,181	9,829,653	58,292,920	92,959,754	10 40
1923.....	22,357,268	9,433,839	59,327,961	91,119,068	10 03
1924.....	24,330,486	9,185,377	64,194,326	97,710,189	10 59

¹ Does not include provincial government savings banks.

64.—Business of the Post Office Savings Banks, March 31, 19 9-1924.

Items.	1919.	1920.	1921.	1922.	1923.	1924.
Savings banks.....No.	1,328	1,323	1,328	1,303	1,307	1,345
Deposits.....\$	12,593,190	10,003,068	6,631,685	3,499,339	2,606,611	7,118,912
Transferred from Government S.B. to Post Office S.B.....\$	174,143	184,303	589,247	56,468	-	207,053
Interest on deposits.....\$	1,208,559	1,056,545	883,842	767,302	677,918	672,436
Total cash and interest.....\$	13,975,892	11,243,916	8,104,774	4,323,109	3,284,529	7,791,348
Withdrawals.....\$	13,604,411	21,293,282	10,699,749	8,496,547	5,764,442	5,199,220
At credit of open accts.....\$	41,654,960	31,605,594	29,010,619	24,837,181	22,357,268	25,156,449
Open accounts.....No.	116,541	97,154	88,563	82,196	76,111	81,104

65.—Business of the Dominion Government Savings Banks, March 31, 1919-1924.

Items.	1919.	1920.	1921.	1922.	1923.	1924.
	\$	\$	\$	\$	\$	\$
Deposits.....	2,344,918	2,378,600	2,103,873	1,400,906	1,223,171	1,344,503
Interest on deposits.....	340,378	319,800	294,349	289,210	278,640	263,551
Total cash and interest.....	2,685,296	2,698,400	2,398,222	1,690,116	1,501,811	1,608,054
Withdrawals.....	3,460,481	3,371,280	2,977,251	2,010,652	1,897,625	1,986,806
At credit of depositors.....	11,402,098	10,729,218	10,150,189	9,829,653	9,433,839	9,055,086

66.—Total Business of Post Office and Dominion Government Savings Banks, March 31, 1919-1924.

Items.	1919.	1920.	1921.	1922.	1923.	1924.
	\$	\$	\$	\$	\$	\$
Deposits.....	15,112,251	12,565,971	9,324,805	4,956,713	3,829,782	8,463,415
Interest on deposits.....	1,548,937	1,376,345	1,178,191	1,056,512	956,558	935,987
Total cash and interest.....	16,661,188	13,942,316	10,502,996	6,013,225	4,786,340	9,399,402
Withdrawals.....	17,064,892	24,664,562	13,677,000	10,507,199	7,662,067	7,186,026
At credit of depositors.....	53,057,058	42,334,812	39,160,808	34,666,834	31,791,107	34,211,535

3.—Loan and Trust Companies.

Business such as that now transacted by loan and trust companies was first carried on by an incorporated Canadian company in 1844, when the Lambton Loan and Investment Company was established. In order to legalize and encourage their operations, an Act to this end was passed by the Legislature of Upper Canada in 1846, followed in the same year by a similar Act in Lower Canada, and in 1847 and 1849 by Acts in New Brunswick and Nova Scotia respectively. These early companies were termed building societies; their activities comprised mainly the lending of money on security of real estate and also the lending of money to members without their being liable to the contingency of losses or profits in the business of the society. In addition to these operations, such companies were authorized, by an Act of 1859, to "borrow money to a limited extent." Later, by the Building Societies Act of 1874, authority was given to receive money on deposit and for the board of directors to issue debentures subject to certain restrictions as to amounts of deposits.

The number of Loan and Savings Societies in operation and making returns to the government at Confederation was 19, with an aggregate paid-up capital of

\$2,110,403 and deposits of \$577,299. Rapid increases in the number of companies and total volume of business resulted from subsequent legislation until, in 1899, 102 companies made returns, showing capital stock paid-up of \$47,337,544, reserve funds of \$9,923,728 and deposits of \$19,466,676. Total liabilities had increased from \$3,233,985 to \$148,143,496 between 1867 and 1899.

After slight decreases in the number of companies in operation shortly after the turn of the century, further increases were again recorded until, in 1923, a total of 126 companies were in existence in Canada. Of this number, however, complete statistics are available of only 30, being the companies incorporated by the Dominion Parliament under the Loan Companies Act, 1914, and the Trust Companies Act of the same year. These companies only are required to make returns to the Dominion Government, provincially incorporated companies having purely voluntary relations with Dominion Departments.

The statistics published by the Finance Department in the "Annual Report of the Affairs of Building Societies, Loan and Trust Companies in the Dominion of Canada" until 1913, which included voluntary returns from corporations operating under provincial charters, have been replaced, since 1914, by those in the "Annual Statements of the Loan and Trust Companies incorporated by Acts of the Parliament of Canada"; the latter, since the report of 1923, includes a brief statement of the business of provincially incorporated companies.

Trust companies, it may be added, act as executors, trustees and administrators under wills or by appointment, as trustees under marriage or other settlements, as agents or attorneys in the management of the estates of the living, as guardians of minor or incapable persons, as financial agents for municipalities and companies and, where so appointed, as authorized trustees in bankruptcy. Some companies receive deposits but the loaning of actual trust funds is restricted by law. The principal function of loan companies is the loaning of funds on first mortgage security, the money thus made available for development purposes being secured mainly by the sale of debentures to the investing public and by savings department deposits. Of the loan companies operating under provincial charters, the majority conduct loan, savings and mortgage business, generally in the more prosperous farming communities.

The Abstract of Statements of Loan and Trust Companies in Canada, published by the Department of Insurance for the year ended Dec. 31, 1923, makes possible for the first time in recent years a comparison of the statistics of the operations of provincially incorporated loan and trust companies and those of companies chartered by the Dominion Government. These figures are of particular interest in the case of trust companies, which, on account of the nature of their transactions, are peculiarly provincial institutions, since their chief duties are intimately connected with the matter of probate, which lies within the sole jurisdiction of the provinces. Loan companies also, which often confine the bulk of their operations to particular districts and whose finances are frequently bound up with those of the community, are similar in many respects.

The appended figures of operations for the year 1922 illustrate the relative importance of companies chartered by the Dominion and by Provincial Governments. In the case of trust companies, the item of "Estate, Trust and Agency Funds" affords an idea of the predominance of provincial concerns. Loan company statistics, on the other hand, indicate a rather close comparison between the volume of business done by companies operating under different types of charters.

67.—Summary Statistics of the Operations of Loan and Trust Companies in Canada, 1922.

LOAN COMPANIES.

	Provincial Companies.	Dominion Companies.	Total.
	\$	\$	\$
Book value of Assets.....	86,144,153	102,493,145	188,637,298
Liabilities to the public.....	43,596,178	60,386,903	103,983,081
Capital Stock—			
Authorized.....	61,215,850	96,500,000	157,715,850
Subscribed.....	25,173,867	36,840,240	62,014,107
Paid-up.....	23,939,351	25,241,600	49,180,951
Reserve and Contingency Funds.....	16,816,763	13,740,834	30,557,597
Other liabilities to shareholders.....	3,033,515	188,710	3,222,225
Total liabilities to shareholders.....	43,789,629	39,171,144	82,960,773
Net profit realized during year.....	2,442,551	2,282,562	4,725,113

TRUST COMPANIES.

	Provincial Companies.	Dominion Companies.	Total.
	\$	\$	\$
Assets—			
Company Funds.....	31,418,403	10,353,243	41,771,646
Guaranteed Funds.....	32,885,302	8,628,907	41,514,209
Estates, Trusts and Agency Funds.....	629,953,917	92,449,298	722,403,215
Total.....	694,257,622	111,431,448	805,689,070
Capital Stock—			
Authorized.....	38,600,000	16,100,000	54,700,000
Subscribed.....	19,626,700	9,692,150	29,318,850
Paid-up.....	24,535,332	7,678,401	32,213,733
Reserve and Contingency Funds.....	9,619,689	1,920,836	11,540,525
Unappropriated Surplus.....	1,317,777	165,040	1,482,817
Net profit realized during year.....	1,817,725	712,792	2,530,517

In addition to the provincially-incorporated loan companies mentioned above, there are British and French loan companies doing business in Canada, having Canadian assets of approximately \$8,147,694. The net profit realized in Canada by these companies during 1922, as far as could be ascertained, amounted to \$142,605. There is also a British trust company operating in Canada having Canadian assets of \$1,256,847.

Following are the detailed figures of Loan and Trust Company business carried on by companies chartered by the Dominion Government for the years 1914 to 1923.

68.—Liabilities and Assets of Loan Companies Chartered by the Dominion Government, 1914-1923.

LIABILITIES.

Years.	Liabilities to Shareholders.			Liabilities to the Public.				
	Capital Paid-up.	Reserve Funds.	Total. ¹	Debentures and Debenture Stock.		Deposits.	Interest due and accrued.	Total. ²
				Canada.	Elsewhere and sundries.			
	\$	\$	\$	\$	\$	\$	\$	\$
1914.....	19,238,512	9,374,363	29,375,689	6,688,124	26,101,702	8,104,072	318,504	41,212,402
1915.....	19,401,856	9,878,266	30,155,708	6,764,836	25,538,301	9,193,194	340,627	41,836,958
1916.....	19,673,934	10,319,176	29,993,110	6,889,946	24,653,657	8,987,720	347,864	40,879,187
1917.....	19,813,217	10,705,215	30,518,432	7,075,081	22,430,846	8,934,825	351,420	38,792,172
1918.....	19,945,858	10,938,193	30,884,051	7,442,982	23,501,565	7,802,539	364,087	39,111,173
1919.....	20,191,612	11,923,234	32,114,846	—	—	9,347,096	—	42,405,175
1920.....	24,062,521	13,442,361	39,110,640	16,982,032	18,451,054	15,257,840	—	51,302,620
1921.....	25,750,966	14,278,619	40,629,689	17,682,083	20,265,766	15,868,926	480,547	54,651,433
1922.....	25,241,600	14,740,834	40,013,363	20,360,480	22,390,990	16,910,558	499,661	60,386,903
1923 ³	24,939,622	14,594,343	41,278,750	22,667,861	24,315,010	15,832,368	577,460	63,579,876

ASSETS.

Years.	Real Estate. ⁴	Mortgages on Real Estate.	Collateral Loans.	Bonds, Debentures, Stocks and other Company property.	Cash on hand and in Banks.	Interest, rents, etc., due and accrued.	Total. ⁵
	\$	\$	\$	\$	\$	\$	\$
1914.....	1,763,892	53,710,084	—	11,301,869	3,220,803	591,443	70,588,091
1915.....	1,779,030	52,807,357	—	12,793,309	3,933,004	679,966	71,992,666
1916.....	1,485,267	51,981,926	—	13,482,805	3,241,053	681,246	70,872,297
1917.....	1,577,576	49,712,872	—	14,156,080	3,478,220	751,475	69,676,223
1918.....	1,512,520	48,293,988	—	16,640,017	3,023,839	524,664	69,995,028
1919.....	—	—	—	—	2,838,636	261,810	74,520,021
1920.....	4,753,049	63,725,084	1,750,128	16,593,932	3,363,877	1,658	90,413,261
1921.....	4,979,779	67,147,513	1,618,865	15,328,797	4,568,984	2,790,348	96,698,810
1922.....	5,309,854	69,824,985	1,916,976	16,967,305	4,800,649	2,989,460	102,462,900
1923 ³	5,533,244	73,858,726	1,760,828	16,445,635	3,467,822	3,352,048	104,858,626

¹Includes other liabilities to shareholders.²Includes other liabilities to the public.³Includes other assets.⁴Book value of real estate for company's use.⁵Subject to revision.

69.—Liabilities and Assets of Trust Companies Chartered by the Dominion Government, 1914-1923.

COMPANY FUNDS—LIABILITIES.

Years.	To Shareholders.				To the Public.	Total.
	Capital Paid-up.	Reserve Funds.	Other Liabilities.	Total.	Taxes, borrowed money, etc.	
	\$	\$	\$	\$	\$	\$
1914.....	6,051,146	2,541,413	202,427	8,794,986	1,948,414	10,743,400
1915.....	5,307,128	1,159,479	233,738	6,700,345	606,005	7,306,350
1916.....	5,673,670	1,245,589	287,214	6,919,259	620,470	7,826,943
1917.....	5,297,130	1,275,789	352,153	6,925,072	731,220	7,656,292
1918.....	6,266,203	1,477,617	415,938	8,159,758	676,379	8,856,137
1919.....	7,356,474	1,643,464	391,625	9,391,563	616,378	10,007,941
1920.....	7,465,376	1,908,753	391,975	9,766,104	561,265	10,327,369
1921.....	7,532,777	1,746,579	167,303	9,446,656	499,264	9,945,923
1922.....	7,678,401	1,912,123	46,068	9,636,592	329,827	9,966,419
1923 ¹	7,772,748	1,906,272	38,144	9,717,164	830,553	10,547,717

¹Subject to revision.

69.—Liabilities and Assets of Trust Companies Chartered by the Dominion Government, 1914-1923—concluded.

COMPANY FUNDS—ASSETS.

Years.	Loans.			Real estate.	Government, municipal and school securities, owned.	Stocks.	Cash on hand and in banks.	Market value of real estate, government securities, etc., over book value.	All other assets belonging to the companies.	Total assets of the companies.
	On real estate, first liens.	On real estate, second liens.	On stocks and securities.							
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1914....	5,189,797	113,095	557,625	—	787,400	—	179,928	879,039	3,033,756	10,740,640
1915....	3,972,520	102,395	647,524	—	876,760	—	172,448	5,181	1,529,522	7,306,350
1916....	3,906,986	544,747	374,392	—	1,116,110	—	266,964	32,231	1,585,513	7,826,943
1917....	3,993,484	297,387	253,781	—	1,145,815	—	173,130	3,331	1,789,364	7,656,292
1918....	3,933,962	101,784	294,472	—	1,839,000	—	724,689	5,865	1,936,365	8,836,137
1919....	4,432,455	557,171	496,769	—	2,170,618	—	706,763	8,392	1,635,773	10,007,941
1920....	4,736,064	—	512,800	701,564	2,500,942	349,294	576,125	—	847,463	10,224,252
1921....	4,408,914	—	344,302	908,618	2,400,914	253,779	603,618	—253,598	1,317,785	10,237,930
1922....	5,254,434	—	301,475	567,970	1,584,234	264,186	473,687	—302,974	1,412,205	10,353,243
1923 ²	5,584,167	—	416,791	1,084,082	1,656,304	292,564	486,025	—275,103	1,406,762	10,926,695

TRUST FUNDS—LIABILITIES.

Years.	Guaranteed Funds.			Estate, Trust and Agency Funds.	Total.
	Principal. ¹	Interest due and accrued.	Total.		
	\$	\$	\$	\$	\$
1914.....	8,560,468	—	8,560,468	29,832,343	38,392,811
1915.....	9,727,099	—	9,727,099	31,002,934	40,730,033
1916.....	10,405,318	—	10,405,318	36,756,902	47,162,220
1917.....	11,149,958	—	11,149,958	38,141,389	49,291,347
1918.....	12,743,379	—	12,743,379	56,194,857	68,938,236
1919.....	12,704,672	—	12,704,672	52,084,047	64,788,719
1920.....	9,339,070	135,971	9,475,041	57,225,303	66,700,344
1921.....	8,424,128	125,514	8,549,642	79,252,639	87,811,965
1922.....	8,473,720	126,868	8,600,588	92,449,298	101,049,886
1923 ²	10,316,404	178,096	10,494,500	102,764,835	113,259,335

TRUST FUNDS—ASSETS.

Years.	Guaranteed Funds.					Estate, Trust and Agency Funds.
	First mortgages, and hypothecques upon improved freehold property.	Bonds and debentures.	Stocks.	Cash on hand and in banks.	Other assets.	Total Guaranteed Funds.
	\$	\$	\$	\$	\$	\$
1914.....	13,238,642	2,420,545	—	870,994	13,184,047	29,734,228
1915.....	12,267,515	4,214,787	—	778,473	11,706,041	28,966,816
1916.....	9,273,771	4,841,833	—	2,661,481	13,400,107	30,177,192
1917.....	9,251,407	6,707,457	—	1,351,416	14,247,227	31,557,507
1918.....	9,314,279	9,833,060	—	2,027,618	15,428,747	36,603,704
1919.....	10,950,249	11,393,564	—	2,694,454	19,256,564	44,294,831
1920.....	4,247,183	2,437,106	329,801	843,832	8,809,510	64,895,196
1921.....	4,169,039	2,508,197	—	550,010	8,783,868	79,252,639
1922.....	5,241,872	1,823,290	150,951	546,929	8,785,405	92,449,298
1923 ²	8,553,578	1,009,020	137,807	261,146	312,233	10,494,500

¹ Includes money in trust for investment amounting to \$2,562,455 in 1914, \$3,113,170 in 1915, \$3,799,149 in 1916, \$3,443,682 in 1917 and \$5,170,463 in 1918; similar amounts are included under the heading Estate, Trust and Agency Funds for the years 1920 to 1923. The figure for 1919 is not available.

² Subject to revision.

III.—INSURANCE.

Insurance companies transacting business throughout the Dominion of Canada are licensed by the Dominion Government under Acts administered by the Department of Insurance, under the Minister of Finance, while other insurance companies, doing business only in one province, or, by arrangement, in more provinces than one, are licensed by Provincial Governments. The statistics here published are in the main those of companies doing business under license from the Dominion Government and are divided into three classes relating to: (1) insurance against fire, (2) life insurance and (3) insurance of a miscellaneous character, covering risks of accident, guarantee, employers' liability, sickness, burglary, hail, steam boiler, tornado, weather, inland transportation, automobile, sprinkler leakage, live stock and title. These statistics refer in all cases to the calendar year and are compiled from the report of the Insurance Department.

Since 1915, the Department of Insurance has endeavoured to collect from the available sources statistics of the business transacted by companies holding licenses from the Provincial Governments of Canada, or permitted by the laws of the provinces to transact business without a license. The business of the provincial licensees is divisible into three classes: (1) business transacted by provincially incorporated companies within the province by which they are incorporated; (2) business transacted by provincially incorporated companies in provinces other than those by which they are incorporated; and (3) business transacted by British and foreign companies licensed by the Provincial Governments. Further, under section 129 of the Insurance Act of 1917 (7-8 Geo. V, c. 29), fire insurance on property in Canada may be effected, under specified conditions, with companies or associations outside of Canada which are not licensed to transact insurance business in Canada.

1.—Fire Insurance.

Fire insurance in Canada began with the establishment by British fire insurance companies of agencies, usually situated in the sea ports and operated by local merchants. The oldest existing agency of a British company is that of the Phoenix Fire Office of London, now the Phoenix Assurance Co., Ltd., which first commenced business in Montreal in 1804. On account of the growth of the insurance business of these early British companies, branch offices were established and local managers were appointed, charged with directing the companies' affairs in Canada.

The Halifax Fire Insurance Co. is the first purely Canadian company of which any record is obtainable. Founded in 1809 as the Nova Scotia Fire Association, it was chartered in 1819 and operated in the province of Nova Scotia until 1919, when it was granted a Dominion license. Among the other pioneer fire insurance companies still in operation, mention may be made of the following: the Quebec Fire Assurance Co., which commenced business in 1818 and which was largely confined in ownership and operations to Quebec province; the British America Assurance Co., incorporated in 1833, the oldest company in Ontario; the Western Assurance Co., organized in 1851 and, after a rapid and steady growth, one of the largest companies of its kind on the continent; the two American companies, the *Ætna Insurance Co.*, of Hartford, Conn., and the *Hartford Fire Insurance Co.*, which commenced business in Canada in 1821 and 1836 respectively.

A company desirous of carrying on business throughout Canada must obtain a license from the Dominion Government. If it proposes restricting its operations

to one particular province, a license may be had from that province, and it may transact business within such limits without regard to any general laws of the Dominion relating to insurance. In 1875 an Insurance Department was created as a branch of the Finance Department at Ottawa, under the supervision of an officer known as the "Superintendent of Insurance," whose duties are to see that the laws enacted from time to time by the Canadian Parliament are duly observed by the companies. Some important requirements under these laws are: (1) a deposit of \$50,000 of approved securities with the Government; (2) the appointment of a chief agent with power of attorney from the company; (3) the filing of a statement showing the financial position of the company at the time of its application for a license, and subsequent annual statements of its business. In addition, books of record must be kept at its chief office and be open to the inspection of government officers whose practice is to examine them annually.

The report of the Superintendent of Insurance for the year ended December 31, 1923, shows that at that date there were 169 fire insurance companies doing business in Canada under Dominion licenses, of which 41 were Canadian, 51 were British and 77 were foreign companies, whereas in 1875, the first year for which authentic records were collected by the Insurance Department, 27 companies operated in Canada, 11 Canadian, 13 British and 3 American. The proportionate increase in the number of British and foreign companies from 59 to 76 p.c. of the total number is a very marked point of difference between the fire and life insurance businesses in Canada, the latter being carried on very largely by Canadian companies.

The growth of business, as shown by the amount of insurance in force and premiums received yearly, has been a fairly steady one, the year 1923 showing an increase in premiums received and decreased payments for losses, when compared with 1922. A decline in the rate of losses paid to premiums received may be noticed in most years, the figures indicating that the companies suffered particularly heavy losses in 1877 and 1904, owing to the great fires in St. John and Toronto respectively.

Although in its early days the Dominion did not prove a very lucrative field for fire insurance companies, of late the great advance in building construction and the wide use of improved fire appliances and safety devices reduce materially the danger of serious conflagrations and place the risks assumed by companies in Canada on an equality with those of other countries.

A feature of the fire insurance business during late years, besides the unusual increase in premiums received, is the continued increase in the number of companies which are operating on the mutual or reciprocal plan. These companies, in which all profits or losses are directly received or paid by the policy holders, are making themselves felt as competitive factors in the fire insurance business.

Statistics of Fire Insurance.—Statistical tables of fire insurance in Canada are added, illustrative of the progress of total business since 1869, and of the operations of individual companies for the year 1923. The gross amount of fire insurance policies, new and renewed, taken during 1923 was \$7,573,269,227, as compared with \$6,864,172,228 in the preceding year. The net cash received for premiums was \$55,082,982, while net cash paid for losses was \$35,279,278, or 64 p.c. of the premiums. The net amount in force with companies holding Dominion licenses on Dec. 31, 1923, was \$6,713,750,805, while the net amount in force with provincial companies on the same date was \$975,830,674. In addition, policies amounting to \$558,914,354 were effected by companies, associations or underwriters not licensed to transact business in Canada.

Table 70 shows figures of the growth since 1869 of companies holding Dominion licenses, and Table 71 illustrates the business done in Canada by individual companies during the year 1923, while in Tables 72, 73 and 74 are given figures of the assets, liabilities and income and expenditure of companies of various nationalities during the years 1919 to 1923. A close study of the various items included in these tables will afford an excellent idea of the nature of business transacted by these various groups. A further summary of business by provinces is given in Table 75 for the years 1922 and 1923, with premiums and losses shown by nationality of companies. Further, a general summary of the business transacted by both Dominion and provincial licensees is given in Table 76, with business by unlicensed companies added in Table 77.

70.—Fire Insurance in Force, Premiums received, Losses paid and Percentage of Losses to Premiums, 1869-1923¹.

Years.	Amount in force at end of year.	Premiums received.	Losses paid.	Percent- age of losses to pre- miums.	Years.	Amount in force at end of year.	Premiums received.	Losses paid.	Percent- age of losses to pre- miums.
	\$	\$	\$	p.c.		\$	\$	\$	p.c.
1869....	188,359,809	1,785,539	1,027,720	57.56	1897...	868,522,217	7,157,661	4,701,833	65.69
1870....	191,549,586	1,916,779	1,624,837	84.77	1898...	895,394,107	7,350,131	4,784,487	65.09
1871....	228,453,784	2,321,716	1,549,199	66.73	1899...	936,869,668	7,910,492	5,182,038	65.51
1872....	251,722,940	2,628,710	1,909,975	72.66	1900...	992,332,360	8,331,948	7,774,293	93.31
1873....	278,754,835	2,968,416	1,682,184	55.67	1901...	1,038,687,619	9,650,348	6,774,956	70.20
1874....	306,844,219	3,522,303	1,926,159	54.68	1902...	1,075,263,168	10,577,084	4,152,289	39.26
1875....	364,421,029	3,594,764	2,563,531	71.31	1903...	1,140,453,716	11,384,762	5,870,716	51.57
1876....	404,608,180	3,708,006	2,867,295	77.33	1904...	1,215,013,931	13,169,882	14,099,534	107.06
1877....	420,342,681	3,764,005	8,490,919	225.58	1905...	1,318,146,495	14,285,671	6,000,519	42.00
1878....	409,899,701	3,368,430	1,822,674	54.11	1906...	1,443,902,244	14,687,963	6,584,291	44.83
1879....	407,357,985	3,227,488	2,145,198	66.47	1907...	1,614,703,536	16,114,475	8,445,041	52.41
1880....	411,563,271	3,479,577	1,666,578	47.90	1908...	1,700,708,263	17,027,275	10,279,455	60.37
1881....	462,210,968	3,827,116	3,169,824	82.83	1909...	1,863,276,504	17,049,464	8,646,826	50.72
1882....	526,856,478	4,229,706	2,664,986	63.01	1910...	2,034,276,740	18,725,531	10,292,393	54.96
1883....	572,264,041	4,624,741	2,920,228	63.14	1911...	2,279,868,346	20,575,255	10,936,948	53.16
1884....	605,507,789	4,980,128	3,245,323	65.16	1912...	2,684,355,895	23,194,518	12,119,581	52.25
1885....	611,794,479	4,852,460	2,679,287	55.22	1913...	3,151,930,389	25,745,947	14,003,759	54.39
1886....	586,773,022	4,932,335	3,301,388	66.93	1914...	3,456,019,009	27,499,158	15,347,284	55.81
1887....	634,767,337	5,244,502	3,403,514	64.90	1915...	3,531,620,802	26,474,833	14,161,949	53.49
1888....	650,735,059	5,437,263	3,073,822	56.53	1916...	3,720,058,236	27,783,852	15,114,063	54.40
1889....	684,538,378	5,588,016	2,876,211	51.47	1917...	3,986,197,514	31,246,530	16,379,101	52.42
1890....	720,679,621	5,836,071	3,266,567	55.97	1918...	4,523,514,841	35,954,405	19,359,252	53.84
1891....	759,602,191	6,168,716	3,905,697	63.31	1919...	4,923,024,331	40,031,474	16,679,355	41.67
1892....	821,410,072	6,512,327	4,377,270	67.22	1920...	5,969,872,278	50,527,937	21,935,387	43.41
1893....	814,687,057	6,793,595	5,052,690	74.37	1921...	6,020,513,832	47,312,564	27,572,560	58.28
					1922...	6,348,637,436	48,168,310	32,848,020	68.19
1894....	836,067,202	6,711,369	4,589,363	68.38	1923...	6,713,750,805	50,218,192	31,860,107	63.44
1895....	837,872,864	6,943,382	4,993,750	71.92	Total..	-	754,198,972	438,875,728	58.19
1896....	845,574,352	7,075,850	4,173,501	58.98					

¹Dominion companies.

71.—Fire Insurance Business transacted in Canada, 1923.¹

Companies.	Gross amount of risks taken during year.	Premiums charged thereon.	Rate of premiums per cent of risks.	Net cash received for premiums.	Net cash paid for losses.	Percentage of losses paid to premiums received.
	\$	\$	p.c.	\$	\$	p.c.
Canadian Companies—						
Acadia Fire	35,875,870	478,139	1.33	217,516	195,113	89.70
Antigonish Farmers	323,250	3,271	1.01	3,271	2,060	62.99
Beaver Fire	12,703,776	157,660	1.24	38,735	17,091	44.12
British American	123,799,115	845,035	0.68	323,809	290,242	89.63
British Colonial	2,712,108	36,338	1.34	25,363	2,701	10.65
British Northwestern	28,679,733	299,110	1.04	178,907	120,400	67.30
Canada Accident and Fire	28,971,564	330,675	1.14	158,624	84,220	53.09
Canada National	26,465,647	353,781	1.34	187,273	98,099	52.38
Canada Security	16,646,132	226,822	1.36	95,349	60,333	63.28
Canadian Fire	55,141,348	710,069	1.29	358,789	168,359	46.92
Canadian Indemnity	15,113,168	214,427	1.42	131,636	70,365	53.45
Canadian Lumbermen's	896,975	21,321	2.38	—	—	—
Casualty Company of Canada	403,032	3,670	0.91	2,864	—	—
Cumberland Farmers	205,600	2,067	1.01	2,049	929	45.35
Dominion Fire	39,738,096	467,493	1.18	109,335	189,919	173.70
Dominion Gresham	11,292,462	118,352	1.05	34,015	10,646	31.30
Dominion of Canada Guarantee and Accident	25,382,669	229,019	0.90	125,899	50,840	40.38
Ensign	4,961,770	55,250	1.11	25,810	8,530	33.05
Fire Insurance Co. of Canada	51,854,795	593,920	1.15	280,794	192,911	68.70
General Accident of Canada	12,913,284	151,586	1.17	73,685	36,320	49.29
Globe Indemnity	43,951,064	434,118	0.99	98,027	56,953	58.10
Grain Insurance	28,820,942	276,871	0.96	248,889	159,218	63.97
Guardian Insurance	25,774,633	274,142	1.06	84,809	40,838	48.15
Halifax Fire	4,579,091	69,652	1.52	39,504	14,270	36.12
Hudson Bay	30,467,260	360,936	1.18	177,201	105,186	59.36
Imperial Underwriters	35,446,609	357,617	1.01	146,658	83,919	57.22
King's Mutual	2,599,825	27,609	1.06	26,758	20,736	77.50
Liverpool-Manitoba	60,467,616	657,280	1.09	288,131	174,221	60.47
London Mutual	53,281,017	555,316	1.04	197,815	177,337	89.65
Mercantile	33,575,016	324,850	0.97	141,743	65,317	46.08
Mount Royal	118,255,706	1,414,018	1.19	764,377	527,551	69.02
Mutual Fire	905,456	12,551	1.39	12,488	10,588	84.78
North Empire	42,178,804	479,140	1.14	225,769	144,984	64.22
North West	21,076,750	234,790	1.11	140,935	103,836	73.68
Occidental	43,122,043	549,220	1.27	266,716	189,720	71.13
Pacific Coast	31,841,440	350,969	1.10	188,816	108,268	57.34
Pictou County Farmers	710,640	5,432	0.76	5,398	3,873	71.75
Quebec	41,629,406	431,753	1.04	168,877	92,808	54.96
Reliance	11,237,336	118,591	1.06	39,979	14,463	36.18
Scottish Canadian	13,632,597	190,544	1.40	76,373	40,943	53.61
Western	309,126,431	982,225	0.32	575,810	419,137	72.79
Total	1,416,760,076	13,405,628	0.93	6,288,750	4,153,239	66.04
British Companies—						
Alliance	43,084,353	401,502	0.93	360,383	216,671	60.12
Anglo-Scottish	11,372,361	123,766	1.09	82,264	33,713	40.98
Atlas	92,637,969	1,002,134	1.08	778,412	485,935	62.43
Autocar	11,963,986	133,010	1.11	110,890	77,913	70.26
British Crown	59,006,668	600,967	1.02	435,290	270,539	62.15
British and European	3,235,456	24,581	0.76	20,218	2,281	11.28
British General	22,705,158	204,096	0.90	131,744	56,079	42.57
British Oak	25,243,919	305,306	1.21	246,121	135,683	55.13
British Traders	35,847,215	366,559	1.02	300,296	231,832	77.20
Caledonian	60,599,591	636,968	1.05	453,597	291,927	64.36
Car and General	39,245,187	325,982	0.83	216,564	157,706	72.82
Central	2,330,242	24,874	1.07	16,826	2,887	17.16
Century	40,921,762	419,793	1.03	271,066	186,583	68.83
China	263,820	5,025	1.90	—1,663	69	—
Commercial Union	150,371,499	1,250,561	0.83	948,509	591,783	51.85
Cornhill	16,216,883	160,467	0.99	119,993	59,516	49.60
Eagle, Star and British Dominions	54,799,670	557,502	1.02	409,720	285,571	69.70

¹ Subject to revision.

71.—Fire Insurance Business transacted in Canada, 1923¹—con.

Companies.	Gross amount of risks taken during year.	Premiums charged thereon.	Rate of pre-miums per cent of risks.	Net cash received for premiums.	Net cash paid for losses.	Per-cent of losses paid to pre-miums re-ceived.
	\$	\$	p.c.	\$	\$	p.c.
British Companies—concluded.						
Employers Liability.....	96,924,065	922,842	0.95	712,921	375,154	52.62
Essex and Suffolk.....	24,140,278	247,205	1.02	99,320	66,141	66.59
General Accident, Fire and Life.	55,346,816	466,855	0.84	386,221	226,554	58.66
Guardian Assurance.....	178,100,728	1,863,893	1.05	1,586,443	998,935	62.97
Law Union and Rock.....	42,501,748	455,281	1.07	373,410	200,087	53.58
Liverpool and London and Globe.	171,385,859	1,952,736	1.14	1,439,117	795,794	55.30
London Guarantee and Accident	60,847,514	638,526	1.05	431,896	241,219	55.85
London and Lancashire Insur- ance.....	166,131,342	1,659,824	1.00	1,370,219	880,050	64.23
London Assurance.....	65,586,182	701,185	1.07	609,571	368,223	60.41
Merchants Marine.....	31,305,052	260,475	0.83	179,248	75,121	11.91
Motor Union.....	21,700,424	188,757	0.87	147,990	108,434	73.27
National Provincial Insurance.....	19,945,263	194,293	0.97	137,885	76,154	55.23
North British and Mercantile.....	147,682,246	1,476,573	1.00	1,153,029	750,426	65.08
Northern Assurance.....	103,408,693	1,173,600	1.13	970,791	695,470	71.64
Norwich Union Fire.....	128,034,849	1,392,054	1.09	1,108,496	736,289	66.42
Ocean Accident and Guarantee.	45,810,465	496,361	1.08	384,752	251,134	65.27
Palatine.....	50,041,459	563,071	1.13	442,880	292,434	66.03
Patriotic.....	12,620,744	122,645	0.97	96,163	29,573	30.75
Phoenix of London.....	144,846,295	1,635,907	1.13	1,204,156	682,507	56.68
Provincial.....	24,603,332	262,057	1.07	224,661	152,258	67.77
Prudential.....	3,806,337	36,267	0.95	36,233	2,345	6.47
Queensland.....	30,682,700	332,944	1.09	276,381	266,563	96.45
Royal Exchange.....	85,015,258	867,486	1.02	638,207	339,979	53.27
Royal Insurance.....	247,851,735	2,446,243	0.99	1,974,405	1,177,426	59.63
Royal Scottish.....	29,649,093	311,464	1.05	240,277	169,139	70.39
Scottish Metropolitan.....	25,189,875	280,980	1.12	229,713	133,919	58.30
Scottish Union.....	48,642,915	470,757	0.97	407,311	230,752	56.65
Sun Insurance.....	92,875,349	1,067,106	1.15	869,596	489,000	56.23
Union Assurance.....	89,585,593	841,144	0.94	640,613	426,699	66.61
Union of Canton.....	71,224,832	729,371	1.02	559,690	449,653	80.34
United British.....	13,893,358	120,620	0.87	99,090	57,896	58.43
World Marine.....	4,491,956	45,918	1.02	34,421	9,298	27.01
Yangtze.....	14,228,069	148,322	1.04	114,350	76,748	67.12
Yorkshire.....	43,968,359	517,206	1.18	395,477	319,669	80.83
Total.....	3,061,914,532	31,433,062	1.03	24,475,163	15,237,732	62.26
Foreign Companies—						
Ætna.....	72,691,494	658,774	0.91	537,025	372,781	69.42
Affiliated Underwriters.....	12,693,286	78,902	0.62	57,711	74,071	128.35
Agricultural.....	13,691,062	122,283	0.89	80,914	61,682	76.23
Alliance Insurance.....	30,689,150	223,051	0.73	177,466	161,196	90.83
American Alliance.....	1,704,108	21,738	1.28	6,347	1,650	25.99
American Central.....	32,092,529	316,824	0.99	165,099	140,002	84.80
American Equitable.....	14,322,066	158,804	1.11	127,963	101,554	79.37
American Exchange.....	7,159,250	26,609	0.37	24,604	670	2.72
American Fire of New York.....	29,455,753	254,639	0.86	157,680	96,046	60.91
American Insurance.....	16,240,503	159,818	0.98	95,905	57,475	59.93
American Lloyds.....	8,733,371	67,030	0.77	56,132	47,284	84.24
Balaise.....	15,222,390	195,256	1.28	145,897	64,576	44.26
Boston.....	18,524,353	228,223	1.23	122,488	97,175	79.33
Caledonian-American.....	10,973,352	117,945	1.07	52,681	34,891	66.24
California.....	15,010,434	162,698	1.08	126,052	62,406	49.51
Central Man'rs Mutual.....	17,150	102	0.60	81	-	-
Citizens of Missouri.....	2,821,276	45,823	1.62	31,663	15,522	49.02
Columbia.....	17,247,209	198,903	1.15	126,063	83,470	66.21
Commercial Union of N.Y.....	887,065	13,126	1.48	5,852	3,793	64.81
Connecticut.....	30,022,975	298,060	0.99	200,854	93,746	46.67
Continental.....	70,533,458	742,937	1.05	533,821	368,013	68.94
Equitable Fire and Marine.....	24,798,304	235,170	0.95	56,961	21,568	37.86
Fidelity-Phoenix.....	61,604,178	649,889	1.05	480,236	288,307	60.03
Fire Association of Philadelphia	21,832,494	222,067	1.02	175,098	67,111	38.33
Fire Reinsurance.....	45,645,683	422,395	0.93	205,054	162,371	79.18
Fireman's Fund.....	32,043,635	235,503	0.73	144,146	150,933	104.71

¹ Subject to revision.

71.—Fire Insurance Business transacted in Canada, 1923¹—concluded.

Companies.	Gross amount of risks taken during year.	Premiums charged thereon.	Rate of premiums per cent of risks.	Net cash received for premiums.	Net cash paid for losses.	Percentage of losses paid to premiums received.
	\$	\$	p.c.	\$	\$	p.c.
Foreign Companies—concluded.						
Firemen's Insurance.....	10,637,831	126,539	1.19	93,158	48,297	51.84
General of Paris.....	21,931,463	191,727	0.87	131,232	60,567	46.15
Girard.....	2,958,338	34,518	1.17	23,653	21,894	92.57
Glens Falls.....	32,513,286	327,873	1.01	201,888	191,643	94.92
Globe and Rutgers.....	142,322,147	1,077,112	0.76	833,973	698,576	83.76
Grain Dealers.....	915,950	16,939	1.85	10,528	9,729	92.41
Great American.....	73,683,914	711,731	0.97	510,401	381,016	74.65
Hardware Dealers.....	8,160,569	179,908	2.20	147,955	60,729	41.05
Hartford Fire.....	212,962,348	1,911,175	0.90	1,582,203	915,422	57.86
Home Insurance.....	205,743,570	2,386,160	1.16	1,917,947	1,137,294	59.30
Imperial Assurance.....	11,265,192	156,902	1.39	96,956	42,137	43.46
Individual Underwriters.....	34,112,227	119,197	0.35	45,923	13,872	30.21
Insurance Co. of North America	138,409,054	1,151,373	0.83	917,958	743,054	80.95
Insurance Co. of State of Pennsylvania.....	21,128,366	209,088	0.99	146,937	81,324	55.35
Lumbermen's Indemnity Exchange.....	15,036,341	434,016	2.89	275,214	143,601	52.18
Lumbermen's Underwriting Alliance.....	21,554,298	377,192	1.75	291,683	179,288	61.47
Lumber Underwriters.....	4,515,940	80,249	1.78	53,236	28,305	53.17
Manufacturing Lumbermen's.....	15,933,396	286,563	1.80	231,466	182,812	78.98
Mechanics and Traders.....	1,138,060	24,081	2.12	16,084	9,653	60.02
Merchants Fire.....	25,339,884	258,770	1.02	217,017	94,041	43.33
Millers National.....	8,634,678	97,664	1.13	83,025	49,769	59.94
Mill Owners Mutual.....	2,417,596	43,629	1.80	30,031	52,672	175.39
Minnesota Implement.....	8,160,569	179,908	2.20	147,955	60,729	41.05
National-Ben Franklin.....	19,136,803	229,101	1.20	183,829	104,002	56.58
National Fire of Hartford.....	75,252,616	854,408	1.14	658,021	474,607	72.13
National Union.....	26,927,408	278,460	1.03	207,206	161,788	78.08
La Nationale.....	66,921,697	781,503	1.17	578,736	363,996	62.89
Newark.....	18,609,721	211,393	1.14	113,195	79,025	69.81
New Hampshire.....	24,994,237	268,777	1.08	175,002	95,300	54.46
New Jersey.....	10,336,589	122,014	1.18	75,803	39,866	52.59
New York Reciprocal Underwriters.....	33,918,263	98,937	0.29	46,630	15,084	32.35
Niagara.....	53,868,131	489,426	0.91	303,010	192,058	63.38
Northwestern Mutual.....	33,980,413	774,048	1.99	668,401	262,563	39.28
Northwestern National.....	28,567,052	350,802	1.23	216,080	102,749	47.55
Pacific.....	19,193,835	177,892	0.93	151,791	84,873	55.91
Phenix of Paris.....	22,785,287	222,186	0.98	152,044	72,848	47.91
Phenix of Hartford.....	70,329,057	689,929	0.98	425,609	209,352	49.19
Providence Washington.....	36,168,858	354,289	0.98	148,529	159,962	107.70
Queen of America.....	90,453,412	943,045	1.04	739,667	432,555	58.48
Retail Hardware.....	8,160,569	179,908	2.20	147,955	60,729	41.05
Rossia Ins. Co. of America.....	126,694,266	948,353	0.75	728,895	362,242	49.70
St. Paul Fire and Marine.....	51,985,080	502,761	0.97	362,196	214,460	59.21
Security.....	14,586,897	142,169	0.97	90,937	53,478	58.81
Springfield Fire and Marine.....	46,256,674	484,028	1.05	317,526	285,898	90.02
Sprinklered Risk.....	5,226,800	20,558	0.39	13,589	278	2.05
Sterling.....	13,263,308	114,628	0.86	91,006	67,472	74.14
Stuyvesant.....	21,320,091	221,559	1.04	176,173	102,165	57.99
Tokio.....	11,686,864	109,208	0.93	70,365	43,866	62.34
L'Union of Paris.....	35,693,888	404,574	1.13	327,308	258,788	79.07
United States Fire.....	28,145,856	221,067	0.79	155,050	176,660	113.94
Westchester.....	38,718,930	352,877	0.91	229,491	157,817	68.77
Total.....	2,664,324,147	26,786,784	1.01	19,454,280	12,469,135	64.09
Grand Total.....	7,172,998,755	71,625,474	1.00	50,218,201	31,860,106	63.44

¹ Subject to revision.

72.—Assets of Canadian Companies selling Fire Insurance, or Fire Insurance and other classes of Insurance, and Assets in Canada of Companies other than Canadian transacting such business in Canada, 1919-1923.

Items.	1919.	1920.	1921.	1922.	1923. ¹
	\$	\$	\$	\$	\$
Canadian Companies—					
Real estate.....	2,027,655	2,009,353	2,515,633	2,819,459	2,804,493
Loans on real estate.....	2,101,585	2,275,827	2,723,882	2,601,497	2,495,241
Stocks, bonds and debentures.....	20,915,449	23,291,113	23,223,601	23,227,586	24,156,802
Agents' balances and premiums out- standing.....	4,950,477	5,535,073	3,622,844	3,458,213	3,262,910
Cash on hand and in banks ²	4,538,576	4,997,250	3,372,212	3,219,828	3,644,063
Interest and rents.....	480,352	521,380	504,320	514,694	509,503
Other assets.....	682,642	1,010,843	913,236	2,065,959	1,646,534
Total assets.....	35,696,736	39,610,839	36,875,728	37,907,236	38,519,546
British Companies—					
Real estate.....	2,563,168	2,899,249	3,245,714	3,911,121	3,595,718
Loans on real estate.....	3,969,328	13,047,264	3,862,043	3,128,477	3,387,893
Stocks, bonds and debentures.....	24,460,316	32,024,536	33,012,921	35,595,688	36,361,107
Agents' balances and premiums out- standing.....	3,612,027	4,124,467	3,671,432	3,872,381	3,961,170
Cash on hand and in banks ²	3,710,520	4,817,260	3,737,475	3,776,300	3,663,662
Interest and rents.....	225,742	819,590	297,468	310,931	316,186
Other assets in Canada.....	517,991	698,257	506,296	402,878	434,468
Total assets in Canada.....	39,059,092	58,430,623	48,333,349	50,997,776	51,720,204
Foreign Companies—					
Real estate.....	—	—	—	—	—
Loans on real estate.....	—	—	—	—	6,500
Stocks, bonds and debentures.....	13,840,421	17,745,711	20,453,162	21,388,605	23,275,613
Agents' balances and premiums out- standing.....	2,186,593	2,551,869	2,416,245	2,612,539	2,640,813
Cash on hand and in banks ²	4,302,292	6,626,823	4,591,978	4,255,256	5,313,105
Interest and rents.....	158,401	183,333	216,573	225,652	248,695
Other assets in Canada.....	75,283	93,478	32,926	183,623	49,203
Total assets in Canada.....	20,562,990	27,201,214	27,710,884	28,665,675	31,533,959
All Companies—					
Real estate.....	4,590,823	4,908,602	5,761,347	6,730,580	6,400,211
Loans on real estate.....	6,070,913	15,323,091	6,585,925	5,729,974	5,889,634
Stocks, bonds and debentures.....	59,216,186	73,061,360	76,689,684	80,211,879	83,793,552
Agents' balances and premiums out- standing.....	10,749,097	12,211,409	9,710,521	9,943,133	9,864,893
Cash on hand and in banks ²	12,551,388	16,441,333	11,701,665	11,251,384	12,620,830
Interest and rents.....	864,495	1,524,303	1,018,361	1,051,277	1,074,384
Other assets in Canada.....	1,275,916	1,802,578	1,452,458	2,652,460	2,130,205
Total assets in Canada.....	95,318,818	125,272,676	112,919,961	117,570,687	121,773,709

¹ Subject to revision.² Or deposited with government.

73.—Liabilities of Canadian Companies selling Fire Insurance, or Fire Insurance and other classes of Insurance, and Liabilities in Canada of Companies other than Canadian transacting such business in Canada, 1919-1923.

Items.	1919.	1920.	1921.	1922.	1923. ¹
	\$	\$	\$	\$	\$
Canadian Companies—					
Unsettled losses.....	4,221,470	4,950,257	4,439,371	4,090,186	3,570,770
Reserve of unearned premiums.....	9,355,790	10,908,023	10,796,291	10,808,481	11,383,079
Sundry items.....	4,170,922	4,374,692	3,818,689	4,456,190	3,979,288
Total liabilities, not including capital	17,748,182	20,232,972	19,054,351	19,354,857	18,933,137
Excess of assets over liabilities, excluding capital.....	17,948,554	19,407,867	17,821,377	18,552,678	19,586,409
Capital stock paid up.....	12,937,306	13,884,478	14,096,696	14,927,193	14,876,879
British Companies—					
Unsettled losses.....	2,529,672	3,019,747	3,194,287	4,410,430	3,093,352
Reserve of unearned premiums.....	13,563,203	16,561,259	16,327,032	16,563,650	17,344,237
Sundry items.....	2,461,967	1,471,491	2,108,192	1,404,142	1,390,112
Total liabilities in Canada	18,554,842	21,052,497	21,629,511	22,378,222	21,827,701
Excess of assets over liabilities, excluding capital.....	20,504,250	37,378,126	26,703,838	28,619,554	29,892,502
Capital stock paid up.....	—	—	—	—	—
Foreign Companies—					
Unsettled losses.....	1,335,225	1,937,173	2,089,288	2,825,192	2,331,193
Reserve of unearned premiums.....	7,620,914	9,621,789	9,668,233	10,295,153	11,348,024
Sundry items.....	1,441,183	1,313,944	811,667	717,936	676,332
Total liabilities in Canada	10,397,322	12,872,906	12,569,188	13,838,281	14,355,549
Excess of assets over liabilities, excluding capital.....	10,165,668	14,328,308	15,141,686	14,827,294	17,178,410
Capital stock paid up.....	—	—	—	—	—
All companies—					
Unsettled losses.....	8,086,367	9,907,177	9,722,946	11,325,808	8,995,315
Reserve of unearned premiums.....	30,539,907	37,091,071	36,791,556	37,667,284	40,075,340
Sundry items.....	8,074,072	7,160,127	6,738,548	6,578,268	6,045,732
Total liabilities in Canada, not including capital	46,700,346	54,158,375	53,253,050	55,571,360	55,116,387
Excess of assets over liabilities, excluding capital.....	48,168,472	71,114,301	59,666,901	61,999,526	66,657,321
Capital stock paid up ²	12,937,306	13,884,478	14,096,696	14,927,193	14,876,879

¹ Subject to revision.

² Canadian Companies only.

74.—Cash Income and Expenditure of Canadian Companies selling Fire Insurance or Fire Insurance and other classes of Insurance, and Cash Income and Expenditure in Canada of Companies other than Canadian transacting such business in Canada, 1919-1923.

Items.	1919.	1920.	1921.	1922.	1923. ¹
INCOME.	\$	\$	\$	\$	\$
Canadian Companies—					
Net cash for premiums from fire and other.....	18,329,956	21,662,202	19,302,371	19,494,334	20,073,713
Interest and dividends on stocks, etc.....	1,240,566	1,424,109	1,558,982	1,524,868	1,530,658
Sundry items.....	65,674	190,538	189,824	1,100,666	1,881,949
Total cash income.....	19,636,196	23,276,849	21,051,177	22,119,858	23,486,320
British Companies²—					
Net cash for premiums.....	20,377,872	25,332,651	30,891,766	30,621,397	32,100,128
Interest and dividends on stocks, etc.....	1,219,425	2,026,582	1,583,811	1,710,848	1,739,378
From branches other than Fire or Life.....	4,429,295	7,636,827	—	—	—
Sundry items.....	1,084	1,053	6,374	67,887	8,995
Total cash income.....	26,027,676	34,997,113	32,481,951	32,357,571	33,848,501
Foreign Companies²—					
Net cash for premiums.....	13,237,767	17,191,584	19,976,929	21,280,172	23,729,834
Interest and dividends on stocks, etc.....	673,023	898,663	1,104,775	1,020,165	1,172,925
From branches other than Fire or Life.....	2,789,164	4,011,276	—	—	—
Sundry items.....	145	202	33,191	9,310	1,286
Total cash income.....	16,700,099	22,101,725	21,114,895	22,309,647	24,904,045
EXPENDITURE.					
Canadian Companies—					
Paid for losses.....	5,031,061	5,712,042	6,807,210	7,329,784	7,118,132
General expenses.....	4,498,537	5,418,225	5,451,726	4,938,317	5,747,939
On account of branches other than Fire or Life.....	7,571,999	9,487,924	9,201,593	7,756,401	8,051,045
Dividends or bonus to shareholders.....	869,195	1,087,082	842,083	795,233	671,318
Taxes.....	—	—	—	791,182	713,993
Total cash expenditure.....	17,970,792	21,705,273	22,302,612	21,610,917	22,307,348
Excess of income over expenditure.....	1,665,404	1,571,576	—1,251,435	508,941	1,178,972
British Companies²—					
Paid for losses.....	8,387,864	11,004,078	13,171,415	16,920,368	15,237,732
General expenses.....	7,121,830	9,020,281	9,404,545	9,027,021	8,759,266
On account of branches other than Fire or Life.....	4,233,299	6,665,666	7,961,092	6,304,348	7,606,316
Taxes.....	—	—	—	1,045,354	1,016,884
Total cash expenditure.....	19,742,993	26,690,025	30,537,052	32,897,091	32,620,198
Excess of income over expenditure.....	6,284,683	8,307,088	1,944,899	589,383	1,228,303
Foreign Companies²—					
Paid for losses.....	5,555,268	7,751,902	10,300,938	11,237,346	12,469,135
General expenses.....	4,483,060	6,087,763	6,351,600	6,054,194	6,322,634
On account of branches other than Fire or Life.....	2,328,857	3,212,956	4,704,705	2,596,463	4,774,838
Taxes.....	—	—	—	777,497	749,672
Total cash expenditure.....	12,367,185	17,052,621	21,357,243	20,781,875	24,716,167
Excess of income over expenditure.....	4,332,914	5,049,104	—242,348	1,527,772	187,877

¹ Subject to revision.² Income and expenditure in Canada.

75.—Amount of Net Premiums written and Net Losses incurred in Canada, by Provinces, by Canadian, British and Foreign Companies transacting Fire Insurance Business, 1922 and 1923.

(Licensed re-insurance deducted.)

Provinces.	Canadian.		British.		Foreign.	
	Premiums.	Losses.	Premiums.	Losses.	Premiums.	Losses.
1922.	\$	\$	\$.	\$	\$	\$
P. E. Island.....	39,608	32,521	126,861	108,849	67,309	93,595
Nova Scotia.....	465,935	373,005	979,904	690,434	1,162,719	726,557
New Brunswick.....	374,911	374,738	1,119,865	1,020,763	910,432	761,878
Quebec.....	2,035,621	1,567,237	5,888,501	4,696,746	4,138,770	2,920,977
Ontario.....	3,285,325	2,452,041	8,731,980	6,598,437	5,379,875	3,316,558
Manitoba.....	815,279	558,629	1,631,016	1,158,350	1,395,550	956,316
Saskatchewan.....	1,048,033	611,989	1,465,454	725,151	1,328,827	644,103
Alberta.....	790,774	652,144	1,525,038	1,037,873	1,318,320	853,073
British Columbia.....	748,820	394,921	2,136,719	793,430	2,042,977	964,289
Yukon.....	—	—	6,691	2,271	3,464	—
Total.....	9,604,306	7,017,225	23,681,866	16,920,367	17,750,034	11,237,346
1923.						
P. E. Island.....	37,195	19,997	122,384	56,954	66,077	20,678
Nova Scotia.....	412,197	192,108	1,034,106	374,735	1,067,844	518,491
New Brunswick.....	346,795	331,075	1,029,022	714,892	912,714	440,820
Quebec.....	1,944,902	1,643,630	6,085,351	3,949,415	4,581,579	3,133,269
Ontario.....	2,963,109	2,052,861	9,362,006	5,966,129	6,022,995	3,836,929
Manitoba.....	800,692	474,367	1,596,690	1,180,289	1,534,766	1,137,289
Saskatchewan.....	1,030,307	626,009	1,510,735	806,876	1,534,311	821,894
Alberta.....	736,653	440,789	1,482,670	1,013,377	1,416,394	940,640
British Columbia.....	750,964	518,579	2,175,059	1,133,627	2,314,633	1,602,308
Yukon.....	342	—	6,654	—	2,967	—
Total.....	9,040,640	6,302,901	24,475,163	15,237,731	19,454,280	12,469,134

Summary of Fire Insurance in Canada, 1922-1923.—Of the total amount of fire insurance effected in Canada during the years 1922 and 1923, a part was sold by companies holding provincial licenses and permits. Such companies generally confine their operations to the province from which they receive authority to operate, but are allowed at the same time to sell insurance in other provinces. The bulk of fire insurance business, however, is that done by Dominion licensees. Operations in 1922 and 1923 are summarized in Table 76. Business transacted by unlicensed companies is summarized in Table 77.

76.—Dominion and Provincial Fire Insurance in Canada, 1922 and 1923.

Business transacted by	Net insurance written.	Net in force at end of year.	Net premiums received.	Net losses paid.
1922.	\$	\$	\$	\$
1. Dominion licensees.....	6,471,133,294	6,348,637,436	48,168,310	32,848,020
2. Provincial licensees—				
(a) Provincial companies within provinces by which they are incorporated.....	386,528,495	1,011,491,072	4,678,775	3,405,873
(b) Provincial companies within provinces other than those by which they are incorporated.....	6,510,439	24,709,887	211,852	175,134
Total for Provincial Companies.....	393,038,934	1,036,200,959	4,890,627	3,581,007
Grand Total.....	6,864,172,228	7,384,838,395	53,058,937	36,429,027
1923.				
1. Dominion licensees.....	7,172,978,755	6,713,750,805	50,218,192	31,860,107
2. Provincial licensees—				
(a) Provincial companies within provinces by which they are incorporated.....	389,871,972	958,645,938	4,761,344	3,314,206
(b) Provincial companies within provinces other than those by which they are incorporated.....	10,398,500	17,184,736	103,446	104,965
Total for Provincial Companies.....	400,270,472	975,830,674	4,864,790	3,419,171
Grand Total.....	7,573,269,227	7,689,581,479	55,082,982	35,279,278

77.—Fire Insurance carried on property in Canada in 1922, under Section 129 of the Insurance Act, 1917, by Companies, Associations or Underwriters not licensed to transact business in Canada.

Companies.	Amount of Insurance.
	\$
Lloyds' Associations.....	62,031,312
Reciprocal Underwriters.....	16,847,295
Mutual Companies.....	432,868,038
Stock Companies.....	47,167,709
Total.....	558,914,354
Description of Property.	
	\$
Lumber and Lumber Mills.....	96,878,359
Other Industrial Plants and Mercantile Establishments.....	438,740,231
Railway Property and Equipment.....	15,223,820
Miscellaneous.....	8,071,944
Total.....	558,914,354
Amount by Provinces.	
	\$
Prince Edward Island.....	26,000
Nova Scotia.....	14,293,228
New Brunswick.....	23,525,360
Quebec.....	175,129,236
Ontario.....	286,743,207
Manitoba.....	10,423,888
Saskatchewan.....	3,877,977
Alberta.....	4,946,418
British Columbia.....	13,739,430
Yukon.....	77,000
Total.....	558,914,354

1 Includes \$26,132,610, not apportioned by provinces.

2.—Life Insurance.¹

NOTE.—In this article the terms Hm and Om refer to the expectation of life tables of healthy males and ordinary males respectively, while $3\frac{1}{2}$ p.c. and 4 p.c. are the assumed interest-earning power of the money invested in life insurance companies. Om (5) means a table from which the low mortality of the first five years after the medical examination required on taking out life insurance policies is excluded.

Life insurance business, introduced into Canada by companies from the British Isles and from the United States as a fairly well developed institution, and taken up almost as early along the same general lines by a native company, can hardly be said to have a distinctive Canadian history. The technique and practice show distinctly the effect of British and United States influences. Among the first companies to transact life insurance business in Canada may be mentioned: Scottish Amicable (1846), Standard (1847), Canada (1847), Ætna (1850), Liverpool and London and Globe (1851) and Royal (1851). The late 60's and early 70's were stirring years in life insurance the world over. In England, the frenzied flotation of companies in this period gave rise to abuses which pointed to the necessity for some control over the formation and operation of companies. Statutes were passed in 1870, '71 and '72 embodying principles—"Freedom and Publicity"—which have, without any fundamental change, since governed in life insurance legislation in England; and in the year 1909 these same principles were extended and adapted to four kinds of insurance. In Canada no fewer than fourteen companies began business in the early seventies, including four native companies, namely: Sun (incorporated 1865, began business 1871), Mutual of Canada (Ontario Mutual, 1870), Confederation (1871) and London (1874). By 1875 there were at least twenty-six companies, possibly several more, competing for the available business in Canada, as against forty-three companies licensed by the Dominion and a few provincial companies, in 1922. A comparison of the first and last lines in Table 78 is of interest in this connection.

The first Dominion Insurance Act was passed in 1868. It prohibited the transaction of insurance business by any company (except companies under provincial authority transacting business within the province) not licensed by the Minister of Finance. A deposit of \$50,000 was required. The main provisions of this Act are traceable in the insurance legislation of the present day. Acts were passed in 1871, 1874, 1875 (consolidation, Fire and Inland Marine and provision for appointment of Superintendent of Insurance under Minister of Finance); 1875 (extending powers of Superintendent to life and other companies); 1877 (consolidating the laws in respect of insurance; quinquennial valuation of policies by Superintendent); 1885 (dealing with commercial insurance companies transacting business on the so-called co-operative or mutual plan, being what is known as assessment companies, fraternal societies excluded); 1886 (consolidation); 1894 (life insurance in combination with any other insurance business forbidden; issue of annuities and endowment assurance by assessment companies prohibited, and new assessment companies required to procure at least 500 applications for membership before license); 1895 (exempting certain fraternal organizations in hazardous occupations granting life, accident, sickness or disability insurance to members, from application of Insurance Act); 1895 (certain amendments as to foreign companies); 1899 (valuation standard to change to Hm $3\frac{1}{2}$ %, applicable to business subsequent to January 1, 1900; all earlier business to be brought up to Hm 4% standard by 1910, and Hm $3\frac{1}{2}$ % by 1915); 1906 (consolidation); 1910 (including many new provisions and restrictions, to some extent in harmony with the recommendations of the Royal Commission on Insurance,

¹ Contributed by A. D. Watson, Actuary, Department of Insurance, Ottawa.

1906); 1917 (largely a new alignment necessitated by the Privy Council decision, 1915, in reference to sections 4 and 70 of the 1910 Act); 1919 (amendment affecting friendly societies); 1922 (miscellaneous amendments referred to below); 1923 (policy conditions for automobile insurance); 1924 (provides that the market value of securities for annual statement purposes may be taken at a date to be fixed by the Superintendent of Insurance, not more than 60 days before the date of statement; that life policies must contain a provision for payment in Canadian money in Canada; that the expenses of the Department of Insurance incurred in the administration of the Insurance Act shall be assessed on the premium income of insurance companies. Previously the whole expenses of the Department had been assessed on insurance companies.)

The legislation briefly reviewed above shows traces of the influence of British and United States legislation. In many respects it may be said to be mid-way between the "freedom and publicity" legislation of England and the inquisitorial and restrictive legislation of the United States. Following the disclosures of the "Armstrong" investigation in New York, a Royal Commission was appointed in 1906 to inquire into the conduct of life insurance business in Canada, and, under the same technical advisor as the "Armstrong Committee," the recommendations of the Commission were in the main the same as of that Committee. Many of the recommendations of the Commission, however, were not embodied in the legislation passed subsequent to the investigation. At the same time, there is possibly a closer analogy between the Acts of 1910 and 1917 and certain United States statutes passed in recent years than obtained between the insurance legislation of the two countries at any earlier period. The valuation basis was changed by the 1910 Act to $Om\ 5\ 3\frac{1}{2}\%$, and companies were authorized to include in life policies provision for waiver of premiums during total disability, and in event of total and permanent disability, to pay in full settlement of the policy an amount not exceeding the sum assured. The 1917 Act permitted the payment of a total and permanent disability benefit of like amount without any reduction in the sum assured. The legislation of 1919 and 1922 is dealt with below at greater length.

The development of life insurance in Canada, as in other English-speaking countries at least, has been marked by an increased service to the individual policyholder. Under the stress of competition, companies more and more seek to bring the benefits of insurance within the reach of an ever-widening *clientèle*; and the benefits which may now be obtained under a life insurance policy are calculated to meet the needs of the policyholder and of his dependants, whether in event of old age or in event of death or of permanent disability. Policies may be obtained under which, if the policyholder becomes unable to follow any occupation by reason of ill-health or accident, not only do premiums cease, but in addition he receives an income under the policy without any reduction in the benefits formerly accruing to the beneficiary at death of the insured.

Within the last few years there has been introduced what is known as "Group Insurance," a plan whereby a group of persons, usually employees, are insured by their employer, for a uniform amount or a varying amount determined by a formula, under one policy, generally on the term plan, the employer paying the premium, or a substantial part thereof, each employee having the right to obtain an individual policy at ordinary normal rates, without medical examination, on termination of employment. Under the "Group Policy", the expenses are less than if individual policies were issued on each life, and consequently the premiums are lower. The plan is as yet in the development stages, but seems to be filling a want.

Industrial life insurance, that is to say, the issue of policies of small amounts at weekly or monthly premiums paid to collectors or agents of the company who call at the home of the insured, is transacted along the same general lines as in other English-speaking countries. The unit premium is 5 cents per week, the sum assured, not the premium, varying with the age at issue of the policy. Children and the aged are alike insured. In some companies the business is written without any medical examination or inspection, other than inspection by the agent who procures the application, or in some cases by a salaried official. In some other companies, a simple medical examination is required for amounts of over, say, \$300, but for smaller amounts applications are accepted from the agent as above, or the applicant may be required to appear before the medical examiner, but is not examined, as ordinarily understood. The amount of the individual policy is small and the total amount on any one life under several policies is usually not large. It, in fact, provides burial insurance for the poorer industrial classes. By reason of the frequent calls of the collectors and the small amount of each policy, a large proportion of the premiums is absorbed in expenses. The companies concerned have been devoting their energies to devising ways and means of reducing the expense ratio, and with success, thus making possible better returns to policyholders. There are at present one Canadian, two United States and one Australian company transacting this business in Canada.

Two other phases in the development of life insurance in Canada require notice, namely, "assessmentism," as practised for a period by a few companies, and "fraternalism," as practised by friendly societies.

Assessmentism was an attempt to obtain life insurance protection at the lowest possible cost. In its cruder forms the age of the individual insured was ignored, except that entrance was restricted to fairly early life, a uniform, and usually low assessment being charged. There was provision in the contract for making additional assessments in certain contingencies—excessive deaths or reduction in funds of the company. It was held that as the means were thus at hand for meeting the exigencies of the business at any time, the companies were sound; and they seemed to be sound, even prosperous, to those unable to see beneath the surface of things, so long as a large proportion of the lives assured were at the early ages, say under 40 or 45, where the rates of mortality are low and increasing but slowly with the age. But, after a considerable proportion of members had passed to the middle and old ages, the weaknesses of the system soon began to be disclosed. The "new blood" theory was then developed, which, stated in simple terms, meant that enough young lives were to be induced to insure to keep the average mortality of the company as a whole at a low rate, thus obviating the necessity for excessive assessments. These young lives, however, in turn grew old and thus the aged became too numerous to be neutralized by "new blood"; assessments became frequent and consequently burdensome; healthy lives, especially the young, soon found they could get insurance much cheaper in ordinary companies and declined to pay the assessments. With their withdrawal, mortality, with no adequate reserves built up to draw upon, soon became unmanageable, and the final *débâcle* was in sight. It is impossible here to follow assessmentism through all its modifications in practice—merely attempts, perhaps generally honest enough, to bolster up an unsound system. The first of these companies appeared in Canada in 1885 and the last disappeared about 1907. Legislation in respect of these companies required that they should represent the nature of their business correctly to the public. A deposit of \$50,000 was obligatory; death benefits were to be a first charge on all assessments; each policy had to state,

"the association is not required by law to maintain the reserve which is required of ordinary life insurance companies", and the words "Assessment System" were required to be printed on every policy, application, circular, etc.

Fraternal societies made their appearance in Canada at a very early date. So far as life insurance is concerned, the development is, as in the case of old line life companies, of more recent years. As above noted, they were at first exempt from the provisions of the Dominion Acts applicable to assessment companies. Notwithstanding the exemption, fundamentally the business and the methods of the two types of institution as respects life insurance were fairly analogous, though the machinery differed. Eventually, the provisions of the statutes originally designed for assessment companies were applied to fraternal societies, and continued to apply until the passing of the 1919 amendment to the Insurance Act.

The fate of friendly societies has been more fortunate than that of assessment companies. Many of them have gone through several readjustments of rates and benefits, and although this has meant loss in membership and a temporary setback, they are now doing business with due regard for sound principles. The 1919 amendment requires the benefit funds of friendly societies to be valued annually by an actuary, and if a deficiency in funds is shown, it must be made good within a reasonable period by an adjustment of rates or benefits. Thus, societies are in no way in the dark as to their actual condition, and if any weakness should be disclosed, the necessary remedy can be applied before anything in the nature of a serious situation arises.

It may be noted that an actuary performing valuations for a friendly society must be a Fellow of one or more of the following societies, namely, the Institute of Actuaries of Great Britain, the Faculty of Actuaries in Scotland or the Actuarial Society of America.

With the passing of the 1919 amendment, certain United States societies, previously transacting business in Canada under provincial authority, were required to obtain Dominion licenses or discontinue business. Up to July 15, 1924, fifteen of these societies were licensed, some of which were actuarially solvent at the date of first license; some have attained solvency since being licensed; the remainder have until March 31, 1925, to attain solvency; otherwise they must thereafter discontinue transacting business in Canada.

The 1922 amendment to the Insurance Act, 1917, in addition to some minor amendments, defines several new classes of insurance; permits life insurance companies to carry on other classes of insurance business under specified conditions; authorizes the issue of life policies, including indemnity benefits in event of accident or sickness, not exceeding a weekly payment of $\frac{1}{2}$ p.c. of the sum assured, and an additional accidental death benefit not exceeding the sum assured; provides for the valuation of securities redeemable at a fixed date, if the market values are "unduly depressed," at values in excess of the market values, but not higher than the values shown in the next preceding annual statement of the company; it also requires Government approval of agents soliciting applications for insurance, but approval is deemed to have been given unless and until the company is advised to the contrary.

In 1894 an Act was passed (see above) forbidding the transaction of life insurance in combination with any other insurance business. As above noted, this principle was reversed by the 1922 amendment, which authorizes a life company, on passing a by-law, confirmed by the members of the company and sanctioned by

the Treasury Board, to engage in any and all other classes of insurance business, provided separate funds (not separate assets) and accounts are maintained in respect of the life insurance business and in respect of the other classes of insurance business transacted. Before commencing any new classes of business, an initial fund is to be set up, the amount to be fixed by the Treasury Board, depending on the number and nature of the additional classes of business to be undertaken, but not less than \$50,000. For the purpose of setting up this initial fund, a life company may transfer thereto any amount to the credit of the shareholders' account in excess of paid up capital; also twenty-five p.c. of the surplus, but not exceeding \$100,000, (allowance being made for contingent allotments and accrued dividends to policyholders), in the life insurance fund. If any profit should be made on the additional classes of business, the life fund is to participate therein in the proportion of the amount so transferred from the life fund to the total amount transferred. Any fund so established may be liquidated under the Winding-up Act as though the company transacted no other class of business and the capital stock of the company subscribed (paid and unpaid) before the date of the separation of funds is liable only in respect of the business transacted before the separation of funds.

A marked feature of life insurance business during the last few years has been a very low death rate. This appears to be in some way a consequence of the high death rate due to war strain and influenza of the few preceding years.

The progress of life insurance in Canada may be studied from the tables appended.

Life Insurance Statistics.—The business of life insurance was transacted in Canada in 1923 by 56 active Dominion companies, including 25 Canadian, 15 British and 16 foreign companies.

As shown by the historical statistics of Table 78, the life insurance business in Canada has expanded from very small beginnings, the total life insurance in force in Dominion companies in 1869 being only \$35,680,082, while in 1923 it was \$3,433,489,876, the amount per head of the estimated population of Canada having more than doubled since 1916—an evidence of the general recognition of the fact that, in view of the higher prices of commodities, a larger amount of life insurance is necessary for the adequate protection of dependants. Notable also from these historical statistics is the fact that in this field the British companies, which were the leaders in 1869, have fallen far behind the Canadian and the foreign companies. The total amount of new insurance effected during the year 1923 was \$561,182,427, while the premiums paid were \$117,811,926, as compared with \$106,886,700 in 1922.

In Table 79 detailed statistics are given of the business of Canadian, British and foreign companies respectively, by companies, in 1923, while Table 80 is a summary showing the business of Canadian, British and foreign companies for the past five years. Table 81 gives the insurance death-rate by classes of companies; Tables 82, 83 and 84 show respectively the assets, liabilities and cash income and expenditure of Canadian and other life insurance companies for the years 1919 to 1923. Statistics of Dominion fraternal insurance are given in Table 85, and of Dominion and provincial insurance combined in Table 86, which shows that on December 31, 1923, the total life insurance in force in Canada was \$3,811,387,309.

78.—Life Insurance in force and effected in Canada, 1869-1923.

Years.	Amount in Force.				Insurance in force per head of estimated population.	Amount of new insurance effected during year.
	Canadian Companies.	British Companies.	Foreign Companies.	Total.		
	\$	\$	\$	\$	\$ cts.	\$
1869	5,476,358	16,318,475	13,885,249	35,680,082	10 45	12,854,132
1870	6,404,437	17,391,922	18,898,353	42,694,712	12 36	12,194,696
1871	8,711,111	18,405,325	18,709,499	45,825,935	13 15	13,332,626
1872	13,070,811	19,258,166	34,905,707	67,234,684	18 62	21,070,101
1873	15,777,197	18,862,191	42,861,508	77,500,896	21 13	21,053,618
1874	19,634,319	19,863,867	46,218,139	85,716,325	22 41	19,108,221
1875	21,957,296	19,455,607	43,596,361	85,009,264	21 87	15,074,258
1876	24,649,284	18,843,173	40,728,461	84,250,918	21 33	13,890,127
1877	26,870,224	19,349,204	39,468,475	85,687,903	21 35	13,534,667
1878	28,656,556	20,078,533	36,016,848	84,751,937	20 78	12,169,755
1879	33,246,543	19,410,829	33,616,330	86,273,702	20 81	11,354,224
1880	37,838,518	19,789,863	33,643,745	91,272,126	21 65	13,906,887
1881	46,041,591	20,983,092	36,266,249	103,290,932	23 88	17,618,011
1882	53,855,051	22,329,368	38,857,629	115,042,048	26 24	20,102,755
1883	59,213,609	23,511,712	41,471,554	124,196,875	28 02	21,572,960
1884	66,519,958	24,317,172	44,616,596	135,453,726	30 20	23,417,912
1885	74,591,139	25,930,272	49,440,735	149,962,146	33 04	27,164,988
1886	88,181,859	27,225,607	55,908,230	171,315,696	37 33	35,171,348
1887	101,796,754	28,163,329	61,734,187	191,694,270	41 33	38,008,310
1888	114,034,279	30,003,210	67,724,094	211,761,583	45 17	41,226,529
1889	125,125,692	30,488,618	76,349,392	231,963,702	48 94	44,556,937
1890	135,218,990	31,613,730	81,591,847	248,424,567	51 83	40,523,456
1891	143,368,817	32,407,937	85,698,475	261,475,229	54 10	37,866,287
1892	154,709,077	33,692,706	90,708,482	279,110,265	57 09	40,260,013
1893	167,475,872	33,543,884	94,602,966	295,622,722	59 89	45,202,847
1894	177,511,846	33,911,885	96,737,705	308,161,436	62 96	49,525,257
1895	188,326,057	34,341,172	90,590,352	319,257,581	63 42	44,341,198
1896	195,303,042	34,837,448	97,660,009	327,800,499	64 45	42,624,570
1897	208,655,459	35,293,134	100,063,684	344,012,277	66 90	48,267,665
1898	226,209,636	36,606,195	105,708,154	368,523,985	70 85	54,784,673
1899	252,201,516	38,025,948	113,943,209	404,170,673	76 88	67,400,733
1900	267,151,086	39,485,344	124,433,416	431,069,846	81 00	68,896,092
1901	284,684,621	40,216,186	138,868,227	463,769,034	86 34	73,899,228
1902	308,202,596	41,556,245	159,053,464	508,812,305	91 98	80,552,966
1903	335,638,940	42,127,260	170,676,800	548,443,000	96 99	91,567,805
1904	364,640,166	42,608,738	180,631,886	587,880,790	100 92	98,306,102
1905	397,946,902	43,809,211	188,578,127	630,334,240	105 20	105,907,336
1906	420,864,847	45,644,951	189,740,102	656,260,900	106 35	95,013,205
1907	450,573,724	46,462,314	118,487,447	685,523,485	108 78	98,267,932
1908	490,266,931	46,161,957	193,087,126	719,516,014	110 85	99,896,206
1909	515,415,437	46,985,192	217,956,351	780,356,980	116 56	131,739,078
1910	565,667,110	47,816,775	242,629,174	856,113,059	123 77	152,762,520
1911	626,770,154	50,919,675	272,530,942	950,220,771	131 85	176,866,979
1912	706,656,117	54,537,725	309,114,827	1,070,308,669	145 32	219,205,103
1913	750,637,092	58,176,795	359,775,330	1,168,590,227	155 25	231,608,546
1914	794,520,423	60,770,658	386,869,397	1,242,160,478	161 47	217,006,516
1915	829,972,809	58,087,018	423,556,850	1,311,616,677	166 83	221,119,558
1916	895,528,435	59,151,931	467,499,266	1,422,179,632	176 99	231,101,625
1917	996,699,282	58,617,506	529,725,775	1,585,042,563	193 77	282,120,430
1918	1,105,503,447	60,296,113	619,261,713	1,785,061,273	214 33	313,251,556
1919	1,362,631,562	66,908,064	758,297,691	2,187,837,317	258 04	524,543,629
1920	1,664,348,605	76,883,090	915,793,798	2,657,025,493	307 83	641,778,095
1921	1,860,026,952	84,940,938	989,875,958	2,934,843,848	333 83	528,193,352
1922	2,013,722,848	93,791,180	1,063,874,968	3,171,388,996	353 68	513,850,912
1923	2,187,430,947	97,987,423	1,148,071,506	3,433,489,876	375 39	561,182,427

1 Subject to revision.

79.—Life Insurance in force and effected in Canada, 1923.

Companies.	Policies Issued.		Policies in Force.		Net Premium Income.	Net Amount of policies become claims. ¹
	No.	Gross Amount.	No.	Net Amount.		
Canadian Companies—		\$		\$	\$	\$
Canada.....	10,425	32,517,841	89,407	231,205,948	7,830,234	2,860,599
Capital.....	839	1,564,190	5,076	8,410,935	271,120	35,144
Commercial.....	467	1,004,000	2,295	5,077,538	128,131	15,000
Confederation.....	9,143	19,458,897	66,604	132,981,876	4,629,224	1,362,131
Continental.....	2,384	3,611,745	13,999	20,524,819	703,062	164,987
Crown.....	5,353	10,233,734	21,986	38,828,101	1,327,038	245,757
Dominion.....	5,116	10,541,258	31,247	61,463,959	2,091,379	380,592
T. Eaton.....	1,133	2,060,330	1,694	3,306,154	99,056	1,000
Excelsior.....	4,246	7,895,036	29,905	50,250,434	1,643,402	371,392
Great West.....	21,200	49,912,965	147,061	328,244,085	10,664,548	1,808,875
Imperial.....	7,918	23,468,943	57,868	133,528,241	5,077,212	920,669
London.....	73,150	40,145,167	353,712	151,688,310	5,159,033	1,264,134
Manufacturers.....	12,221	26,781,034	83,182	162,519,565	5,874,679	1,155,087
Monarch.....	2,616	5,431,500	16,485	33,512,238	965,719	126,010
Mutual of Canada.....	13,892	35,241,915	125,264	258,981,997	9,678,409	2,001,538
National of Canada.....	3,692	6,277,418	17,966	32,954,617	1,040,964	249,990
North American.....	* 7,247	15,045,796	56,331	103,603,714	3,581,176	1,075,480
Northern.....	3,125	6,433,021	18,132	30,631,363	975,798	218,481
Saskatchewan.....	733	1,366,701	3,050	5,881,610	197,211	17,500
Sauvegarde.....	2,478	3,924,500	11,714	16,234,693	495,242	104,600
Security.....	1,618	1,524,360	6,300	6,778,028	166,442	9,967
Sovereign.....	1,272	2,588,770	8,401	16,842,523	555,975	106,470
Sun.....	16,262	46,033,502	157,995	329,353,901	11,204,913	3,322,558
Travellers of Canada.....	2,240	4,723,837	10,003	17,324,937	600,337	80,376
Western.....	799	1,411,365	4,013	7,301,361	188,486	28,000
Total.....	299,569	359,198,825	1,339,690	2,187,430,947	74,821,790	17,926,337
British Companies—						
Commercial Union.....	2	55,000	139	573,515	18,825	26,580
Edinburgh ²	—	—	7	14,923	114	2,412
Gresham.....	—	—	2,162	4,565,224	163,402	20,007
Life Association of Scotland ²	—	—	84	156,814	1,841	26,299
Liverpool and London and Globe.....	—	—	78	130,359	2,706	554
London and Scottish.....	844	2,305,693	9,160	19,526,608	665,222	448,929
Mutual Life and Citizens (Australia).....	42,024	10,641,195	59,166	16,874,283	676,406	115,797
North British and Mercantile.....	23	100,500	510	2,017,923	71,521	14,821
Norwich Union ²	—	—	49	75,382	1,757	3,307
Phoenix of London.....	74	336,500	2,214	7,233,406	210,532	168,055
Royal.....	620	3,180,947	5,520	21,279,931	715,195	293,623
Scottish Amicable ²	—	—	9	22,113	292	2,858
Scottish Provident.....	—	—	3	15,050	93	—
Standard.....	1,362	2,727,716	11,035	25,406,763	779,828	683,053
Star ²	—	—	69	95,129	2,940	11,290
Total.....	44,949	19,347,551	90,205	97,987,423	3,310,674	1,817,585
Foreign Companies—						
Ætna.....	1,155	6,568,833	15,637	60,990,130	1,439,824	773,929
Connecticut Mutual ²	—	—	403	798,930	18,953	21,913
Equitable.....	14	78,486	12,781	34,185,996	1,130,601	900,242
Guardian.....	2	101,000	47	208,070	12,312	1,022
Metropolitan.....	265,448	88,408,219	1,921,652	525,604,435	19,058,114	4,130,098
Mutual of New York.....	2,628	8,028,399	21,473	58,945,194	2,161,972	820,851
National of United States ²	—	—	30	18,869	122	1,258
New York.....	6,101	15,747,621	60,346	134,119,665	4,662,977	1,531,759
Northwestern Mutual ²	—	—	50	40,913	666	6,410
Phoenix Mutual.....	—	—	101	74,953	15,820	15,730
Provident Savings ²	—	—	425	649,388	18,727	27,992
Prudential.....	158,154	46,502,022	956,648	239,060,938	8,886,425	1,271,118
State.....	3	67,500	515	1,247,487	37,785	7,545
Travelers of Hartford.....	3,628	16,307,971	18,452	82,668,363	1,921,784	417,544
Union Mutual.....	236	707,000	3,813	8,783,988	293,064	196,134
United States.....	22	119,000	268	674,187	20,316	5,380
Total.....	437,391	182,636,051	3,012,641	1,148,071,506	39,679,462	10,129,735
Canadian Companies.....	209,569	359,198,825	1,339,690	2,187,430,947	74,821,790	17,926,337
British Companies.....	44,949	19,347,551	90,205	97,987,423	3,310,674	1,817,585
Foreign Companies.....	437,391	182,636,051	3,012,641	1,148,071,506	39,679,462	10,129,735
Grand Total.....	691,909	561,182,427	4,442,536	3,433,489,876	117,811,926	29,873,657

¹ Including matured endowments.² Ceased transacting new business in Canada.

NOTE.—The figures of the above table are subject to revision.

80.—Progress of Life Insurance in Canada, 1919-1923.

Items.	1919.	1920.	1921.	1922.	1923.*
Canadian Companies¹—					
Policies new and taken up.....No.	198,527	208,512	188,416	177,140	209,569
Policies in force at end of year.....“	947,489	1,079,146	1,168,573	1,240,826	1,339,690
Policies become claims.....“	13,106	12,062	10,938	11,912	12,881
Amount of policies new and taken up \$	320,150,705	397,553,184	345,235,336	320,172,624	359,198,825
Net amount of policies in force.....\$	1,362,631,562	1,664,348,605	1,860,026,952	2,013,722,848	2,187,430,947
Net amount of policies become claims.....\$	14,373,721	14,626,037	13,978,105	16,202,861	17,926,337
Amount of premiums in year.....\$	47,126,374	57,205,082	62,764,841	67,881,717	74,821,790
Claims paid².....\$	17,454,054	14,491,847	14,093,985	16,067,831	17,159,852
Unsettled claims—					
Not resisted.....\$	1,902,639	1,845,777	1,648,082	1,661,372	1,777,889
Resisted.....\$	62,993	29,154	22,032	16,054	43,054
British Companies—					
Policies new and taken up.....No.	8,756	14,743	24,959	57,871	44,949
Policies in force at end of year.....“	42,232	50,691	60,621	82,760	90,205
Policies become claims.....“	936	897	930	1,326	1,342
Amount of policies new and taken up \$	11,264,394	15,967,383	16,160,237	23,818,310	19,347,551
Net amount of policies in force.....\$	66,908,064	76,883,090	84,940,938	93,791,180	97,987,423
Net amount of policies become claims.....\$	1,803,020	1,782,399	1,724,079	1,772,762	1,817,585
Amount of premiums in year.....\$	2,201,462	2,776,099	2,917,418	2,914,378	3,310,674
Claims paid².....\$	1,895,928	1,918,850	1,512,555	1,762,359	1,708,841
Unsettled claims—					
Not resisted.....\$	382,258	233,254	336,954	239,422	241,212
Resisted.....\$	2,208	—	10,633	10,000	10,000
Foreign Companies—					
Policies new and taken up.....No.	433,968	431,921	435,045	429,888	437,391
Policies in force at end of year.....“	2,200,603	2,444,166	2,653,733	2,839,645	3,012,641
Policies become claims.....“	27,144	29,294	25,613	26,842	32,520
Amount of policies new and taken up \$	193,128,530	228,257,528	166,797,779	169,859,978	182,636,051
Net amount of policies in force.....\$	758,297,691	915,793,798	989,875,958	1,063,874,968	1,148,071,506
Net amount of policies become claims.....\$	8,339,561	9,036,326	8,312,281	8,961,344	10,129,735
Amount of premiums in year.....\$	25,380,673	30,236,866	33,182,112	36,090,605	39,679,462
Claims paid².....\$	8,727,110	9,307,381	8,300,722	9,020,710	10,125,718
Unsettled claims—					
Not resisted.....\$	852,393	511,363	427,516	430,254	490,079
Resisted.....\$	41,199	138,278	119,425	104,683	104,966
All Companies—					
Policies new and taken up.....No.	641,251	655,176	648,420	664,899	691,909
Policies in force at end of year.....“	3,190,324	3,574,003	3,882,927	4,163,231	4,442,536
Policies become claims.....“	41,186	42,253	37,481	40,080	46,743
Amount of policies new and taken up \$	524,543,629	641,778,095	528,193,352	513,850,912	561,182,427
Net amount of policies in force.....\$	2,187,837,317	2,657,025,493	2,934,843,848	3,171,388,996	3,433,489,876
Net amount of policies become claims.....\$	24,516,302	25,444,762	24,014,465	26,936,967	29,873,657
Amount of premiums in year.....\$	74,708,509	90,218,047	98,864,371	106,886,700	117,811,926
Claims paid².....\$	28,077,092	25,718,078	23,997,262	26,850,900	28,994,411
Unsettled claims—					
Not resisted.....\$	3,137,290	2,590,394	2,412,552	2,331,048	2,509,180
Resisted.....\$	106,400	167,432	152,081	130,737	158,020

¹ Figures of Canadian business only.

² Including matured endowments.

³ Figures for 1923 are subject to revision.

81.—Insurance Death-rate in Canada, 1919-1922.

Companies.	1919.			1920.		
	Number of lives exposed to risk.	Number of deaths.	Death-rate per 1,000.	Number of lives exposed to risk.	Number of deaths.	Death-rate per 1,000.
Active companies, ordinary.....	1,008,389	7,581	7.5	1,177,608	8,125	6.9
Active companies, industrial.....	1,989,367	16,548	8.3	2,215,815	18,634	8.4
Assessment and fraternal societies.....	151,085	1,909	12.6	206,066	2,643	12.8
Non-active and retired companies.....	2,125	118	55.5	1,974	173	87.6
Total.....	3,159,966	26,156	8.3	3,601,463	29,575	8.2
	1921.			1922.		
Active companies, ordinary.....	1,304,130	7,406	5.7	1,389,146	7,833	5.6
Active companies, industrial.....	2,434,322	16,692	6.9	2,644,914	18,106	6.9
Assessment and fraternal societies.....	217,259	2,437	11.2	232,534	2,589	11.1
Non-active and retired companies.....	1,736	123	70.9	1,589	79	49.7
Total.....	3,957,447	26,658	6.7	4,268,183	28,637	6.7

NOTE.—Average death-rate for all companies in the twenty-one years 1901-1921 was 9.5.

82.—Assets of Canadian Life Companies and Assets in Canada of Life Companies other than Canadian Companies, 1919-1923.

Items.	1919.	1920.	1921.	1922.	1923. ³
Canadian Companies—	\$	\$	\$	\$	\$
Real estate.....	16,791,000	17,170,659	18,074,628	19,455,390	21,874,648
Loans on real estate.....	91,325,101	103,895,691	119,895,623	139,566,030	158,447,295
Loans on collaterals.....	1,761,166	1,632,889	1,379,623	2,494,227	2,113,897
Cash loans and premium obligations on policies in force.....	44,611,927	49,303,632	60,230,729	77,798,470	91,380,402
Stocks, bonds and debentures.....	204,639,727	227,785,614	243,136,645	277,228,266	313,460,938
Interest and rent due and accrued.....	8,061,833	9,266,513	11,266,946	13,764,201	15,284,266
Cash on hand and in banks ¹	2,403,405	2,924,976	4,517,661	5,291,622	6,118,989
Outstanding and deferred premiums.....	9,019,887	11,120,733	13,825,291	15,580,017	17,450,409
Other assets.....	293,744	150,486	553,162	594,667	346,106
Total assets².....	378,907,790	423,251,193	472,880,308	551,772,890	626,476,950
British Companies—					
Real estate.....	1,306,036	917,498	895,402	753,492	773,274
Loans on real estate.....	12,998,447	12,727,404	10,655,634	10,127,634	10,815,105
Loans on collaterals.....	18,770	12,165	5,046	4,692	2,955
Cash loans and premium obligations on policies in force.....	2,446,603	2,602,592	3,043,111	3,197,990	3,226,637
Stocks, bonds and debentures.....	20,036,680	19,636,657	21,480,909	25,259,619	29,207,570
Interest and rent due and accrued.....	417,433	402,639	396,519	393,252	384,021
Cash on hand and in banks ¹	756,488	777,234	848,501	828,672	392,539
Outstanding and deferred premiums.....	350,585	387,443	436,909	494,955	513,636
Other assets.....	35,820	37,369	58,683	47,310	39,788
Total assets in Canada.....	38,366,862	37,521,001	37,820,714	41,107,616	45,355,525
Foreign Companies—					
Real estate.....	221,013	218,132	543,524	507,719	603,382
Loans on real estate.....	10,063,742	9,143,873	9,049,828	8,760,587	9,473,352
Loans on collaterals.....	—	15,000	15,000	55,000	—
Cash loans and premium obligations on policies in force.....	11,318,518	12,023,992	14,002,977	15,990,499	17,080,367
Stocks, bonds and debentures.....	86,090,541	99,409,049	114,073,322	132,677,344	147,954,616
Interest and rent due and accrued.....	1,390,927	1,518,272	1,747,341	2,161,031	2,393,732
Cash on hand and in banks ¹	2,077,111	3,919,390	4,344,550	2,625,276	3,081,105
Outstanding and deferred premiums.....	2,296,416	2,808,887	3,161,859	3,398,398	3,790,857
Other assets.....	16,281	16,293	15,377	1,673	4,239
Total assets in Canada.....	113,474,549	129,072,888	146,953,778	166,157,527	184,881,650

¹ Includes cash deposit with Government.

² The figure in the table is the book value; the market value of these assets was \$376,604,050 in 1919, \$420,018,399 in 1920, \$471,103,446 in 1921, \$555,591,851 in 1922 and \$634,178,420 in 1923.

³ The figures for 1923 are subject to revision.

NOTE.—Certain British Companies transacting fire insurance in Canada transact also life insurance in Canada, and inasmuch as a separation of assets has not been made between these two classes, their assets in Canada are not here included, but are included in the assets of British companies shown in Table 72 on page 821.

83.—Liabilities of Canadian Life Companies and Liabilities in Canada of Life Companies other than Canadian Companies, 1919-1923.

Schedule.	1919.	1920.	1921.	1922.	1923.*
	\$	\$	\$	\$	\$
Canadian Companies—					
Unsettled claims.....	3,920,563	3,505,478	3,234,416	3,983,681	5,153,826
Net re-insurance reserve.....	321,027,592	359,548,337	402,023,210	466,997,082	529,435,526
Sundry liabilities.....	16,220,206	19,478,309	31,017,305	44,203,425	52,871,658
Total liabilities, not including capital	341,168,361	382,532,124	436,274,931	515,184,188	587,461,010
Surplus of assets, excluding capital.....	35,435,689	37,486,275	34,828,515	40,407,663	46,717,410
Capital stock paid up.....	5,980,407	6,166,044	6,572,460	6,629,009	6,721,830
British Companies!—					
Unsettled claims.....	384,466	233,253	347,587	249,422	251,212
Net re-insurance reserve.....	19,361,479	20,483,379	22,061,174	22,687,345	23,543,857
Sundry liabilities.....	157,757	201,123	123,365	135,441	431,479
Total liabilities, not including capital	19,903,702	20,917,755	22,532,126	23,072,208	24,226,548
Surplus of assets.....	18,463,160	16,682,334	15,335,119	18,079,488	21,173,057
Foreign Companies!—					
Unsettled claims.....	893,592	649,641	516,941	534,936	595,045
Net re-insurance reserve.....	104,220,027	114,561,395	126,971,831	136,699,116	154,192,381
Sundry liabilities.....	3,621,881	4,413,133	5,438,027	10,949,043	8,631,295
Total liabilities, not including capital	108,735,500	119,624,169	132,956,799	148,183,095	163,418,721
Surplus of assets.....	4,739,049	9,448,719	13,996,979	17,974,432	21,462,929
All Companies—					
Unsettled claims.....	5,198,621	4,388,372	4,128,944	4,768,039	6,000,033
Net re-insurance reserve.....	444,609,098	494,593,111	551,056,215	629,383,543	707,171,764
Sundry liabilities.....	19,999,844	24,092,565	36,578,697	55,287,909	61,934,432
Total liabilities, not including capital	469,807,563	523,074,048	591,763,856	686,439,491	775,106,279
Surplus of assets excluding capital.....	58,637,898	63,617,328	64,160,613	76,461,583	89,353,396
Capital stock paid up ³	5,980,407	6,166,044	6,572,460	6,629,009	6,721,830

* Liabilities in Canada. * Figures for 1923 are subject to revision. * Canadian companies only.

84.—Cash Income and Expenditure of Canadian Life Companies and Cash Income and Expenditure in Canada of Life Companies other than Canadian Companies, 1919-1923.

Schedule.	1919.	1920.	1921.	1922.	1923.*
	\$	\$	\$	\$	\$
INCOME.					
Canadian Companies—					
Net premium income.....	64,433,449	78,725,400	84,808,432	94,275,328	105,784,984
Consideration for annuities.....	2,519,957	2,075,407	1,909,861	2,779,506	7,750,993
Interest and dividends on stocks, etc...	19,911,623	21,631,593	24,257,582	28,017,655	33,733,693
Sundry items.....	1,766,153	2,207,453	1,987,555	2,734,038	3,389,121
Total cash income.....	88,631,182	104,639,853	112,963,430	127,806,527	150,658,791
British Companies—					
Net premium income.....	2,201,462	2,776,099	2,917,419	2,914,379	3,310,674
Consideration for annuities.....	1,050	131	130	18,313	—
Interest and dividends on stocks, etc...	1,977,211	1,838,218	1,785,684	1,829,868	1,951,373
Sundry items.....	86,640	337,771	82,831	117,689	149,334
Total cash income!	4,266,363	4,952,219	4,786,064	4,880,249	5,411,381
Foreign Companies—					
Net premium income.....	25,380,673	30,236,866	33,182,114	36,090,605	39,679,462
Consideration for annuities.....	40,066	21,059	35,696	45,304	29,761
Interest and dividends on stocks, etc...	5,189,215	5,890,062	6,581,194	7,581,166	8,809,268
Sundry items.....	431,784	630,860	680,764	604,648	754,350
Total cash income!	31,041,738	36,778,847	40,479,768	44,321,723	49,272,841

* Income and expenditure in Canada.

* The figures for 1923 are subject to revision.

84.—Cash Income and Expenditure of Canadian Life Companies and Cash Income and Expenditure in Canada of Life Companies other than Canadian Companies, 1919-1923—concluded.

Schedule.	1919.	1920.	1921.	1922.	1923. ²
EXPENDITURE.	\$	\$	\$	\$	\$
Canadian Companies—					
Payments to policyholders.....	38,477,058	36,986,070	37,311,393	47,509,894	57,607,673
General expenses.....	21,912,380	26,755,643	27,463,385	28,742,520	32,268,823
Dividends to stockholders.....	558,021	957,077	728,057	882,977	754,940
Total expenditure.....	60,947,459	64,698,790	65,502,835	77,135,391	90,631,436
Excess of income over expenditure.....	27,683,723	39,941,063	47,460,595	50,671,136	60,027,355
British Companies—					
Payments to policyholders.....	2,149,843	2,407,707	1,875,502	2,194,852	2,201,844
General expenses.....	667,253	1,065,870	1,242,504	1,271,667	1,269,039
Dividends to stockholders.....	—	—	—	—	—
Total expenditure¹.....	2,817,096	3,473,577	3,118,006	3,466,519	3,464,883
Excess of income over expenditure.....	1,449,267	1,478,642	1,668,058	1,413,730	1,946,498
Foreign Companies—					
Payments to policyholders.....	12,386,608	14,044,279	13,847,206	16,531,218	19,585,737
General expenses.....	7,149,276	8,039,873	8,255,026	8,535,289	9,539,212
Dividends to stockholders.....	—	—	—	—	—
Total expenditure¹.....	19,535,884	22,084,152	22,102,232	25,066,507	29,124,949
Excess of income over expenditure.....	11,505,854	14,694,695	18,377,536	19,255,216	20,147,892

¹ Income and expenditure in Canada.

² The figures for 1923 are subject to revision.

Life Insurance on the Assessment Plan.—Table 85 gives statistics of life insurance on the assessment plan, that is, insurance effected through fraternal or friendly societies by assessments on the members thereof and with annual dues to meet expenses. The statistics in the first part of this table relate to the eight Canadian societies reporting to the Insurance Department of the Dominion Government, *viz.*, the Alliance Nationale, the Ancient Order of Foresters, the Artisans Canadiens, the Catholic Mutual Benefit Association, the Commercial Travellers' Mutual Benefit Society, the Independent Order of Foresters (whose statistics include sick and funeral departments), the Royal Guardians and the Woodmen of the World.

Under an amendment to the Insurance Act which became effective January 1, 1920, it became necessary for all foreign fraternal societies previously transacting business in Canada under provincial licenses to obtain licenses under the Insurance Act in order to be permitted to continue to issue new insurance in Canada. Fourteen such societies obtained licenses, *viz.*, the Ladies' Catholic Benevolent Association, the Maccabees, Royal Arcanum, Woman's Benefit Association of the Maccabees, Catholic Order of Foresters, the Workmen's Circle, Knights of Columbus, Association Canada-Américaine, Western Mutual Life Association, Knights of Pythias, the Jewish National Workers' Alliance of America, Brotherhood of American Yeomen, Expressmen's Mutual Benefit Association and the National Fraternal Society of the Deaf. Statistics are given in the second part of the table.

85.—Life Insurance on the Assessment Plan, 1920-1923.

Items.	1920.	1921.	1922.	1923.
CANADIAN COMPANIES.				
Number certificates taken.....	14,234	11,623	13,853	14,642
Number certificates become claims.....	2,773	2,417	2,735	2,734
	\$	\$	\$	\$
Amount paid by members.....	2,691,826	2,651,098	2,975,751	2,764,717
Amount of certificates new and taken up.....	12,727,091	10,774,992	10,083,945	11,086,536
Net amount in force.....	137,057,828	132,427,453	132,952,353	132,043,680
Amount of certificates becomes claims.....	2,636,213	2,319,302	2,418,138	2,401,315
Claims paid.....	2,723,725	2,397,681	2,636,261	2,660,025
Unsettled claims—				
Not resisted.....	192,715	191,841	174,709	151,751
Resisted.....	2,000	1,000	—	—
Amount terminated by—				
Death.....	1,868,508	1,645,521	1,661,902	1,784,547
Surrender, expiry, lapse, etc.....	10,961,533	11,409,840	18,461,980	12,557,056
Total terminated.....	12,830,041	13,055,361	20,123,882	14,341,603
Assets—				
Real estate.....	1,376,462	1,547,378	1,629,223	1,645,624
Loans on real estate.....	7,445,923	7,823,510	8,609,963	9,689,431
Policy loans (liens arising out of readjustment).....	23,406,179	22,638,544	18,797,174	17,632,781
Stocks, bonds and debentures.....	21,825,835	22,190,818	25,814,961	26,258,923
Cash on hand and in banks.....	476,693	799,144	846,155	767,843
Interest and rent due and accrued.....	721,046	835,500	679,798	671,780
Dues from members.....	211,553	213,162	212,703	228,979
Other assets.....	4,993,270	5,572,258	5,036,376	4,731,650
Total assets¹.....	60,456,941	61,620,314	61,626,353	61,627,011
Liabilities—				
Claims, unsettled.....	279,971	292,156	258,585	225,772
Reserves.....	55,327,610	56,601,595	56,467,119	56,663,146
Other liabilities.....	514,684	1,036,905	1,406,359	1,554,285
Total liabilities.....	56,122,265	57,930,656	58,132,063	58,443,203
Income—				
Assessments.....	5,441,478	5,443,211	5,706,129	4,458,882
Fees and dues.....	415,759	464,810	444,258	506,426
Interest and rents.....	2,549,961	2,659,286	2,681,895	2,902,550
Other receipts.....	52,839	56,328	85,383	253,240
Total income.....	8,460,037	8,623,635	8,917,665	9,121,098
Expenditure—				
Paid to members.....	5,547,411	5,042,055	5,489,373	5,287,997
General expenses.....	1,311,921	2,664,942	1,696,353	2,742,750
Total expenditure.....	6,859,332	7,706,997	7,185,726	8,030,747
Excess of income over expenditure.....	1,600,705	916,638	1,731,939	1,090,351

¹ The figure in the text is the book value; the market value of these assets was \$57,965,864 in 1920, \$59,635,458 in 1921, \$60,301,249 in 1922 and \$61,420,888 in 1923.

85.—Life Insurance on the Assessment Plan, 1920-1923—concluded.

Items.	1920.	1921.	1922.	1923.
FOREIGN COMPANIES.				
Number certificates taken.....	5,850	5,314	4,044	5,081
Number certificates become claims.....	711	766	761	905
	\$	\$	\$	\$
Amount paid by members.....	1,044,996	1,080,037	1,213,271	1,216,173
Amount of certificates new and taken up.....	4,323,700	5,572,700	4,795,800	5,855,350
Net amount in force.....	65,700,477	66,121,994	58,527,535	56,192,389
Amount of certificates become claims.....	801,811	899,871	911,428	909,970
Claims paid.....	929,099	863,313	1,099,204	901,506
Unsettled claims—				
Not resisted.....	120,700	126,662	115,282	111,583
Resisted.....	1,000	—	—	—
Amount terminated by—				
Death.....	801,577	860,142	840,687	823,964
Surrender, expiry, lapse, etc.....	1,839,761	4,851,066	13,352,000	8,072,330
Total terminated.....	2,641,338	5,711,208	14,192,687	8,896,294
Assets—				
Real estate.....	—	—	8,000	8,000
Loans on real estate.....	—	—	1,800	1,800
Policy loans (liens arising out of readjustment).....	182,167	185,326	34,100	18,009
Stocks, bonds and debentures.....	195,302	370,497	482,804	763,807
Cash on hand and in banks.....	134,006	237,317	201,899	264,755
Interest and rent due and accrued.....	5,343	5,282	6,223	12,768
Dues from members.....	65,405	56,049	98,692	77,050
Other assets.....	—	—	54	74
Total assets.....	582,223	854,471	833,572	1,146,263
Liabilities—				
Claims, unsettled.....	125,246	129,270	122,101	116,651
Reserves.....	9,625,143	9,832,654	4,904,439	4,091,739
Due on account of general expenses.....	23,665	36,123	22,100	18,233
Other liabilities.....	2,141	1,797	3,035	3,131
Total liabilities.....	9,776,195	9,999,844	5,051,645	4,229,754
Income—				
Assessments.....	1,085,550	1,121,027	1,276,641	1,279,183
Fees and dues.....	243,359	237,717	183,198	267,515
Interest and rents.....	33,088	34,337	46,921	48,855
Other receipts.....	—	—	6,316	2,168
Total income.....	1,361,997	1,393,081	1,513,076	1,597,721
Expenditure—				
Paid to members.....	967,474	909,117	1,160,290	972,036
General expenses.....	132,365	127,204	93,832	131,669
Total expenditure.....	1,099,839	1,036,321	1,254,122	1,103,705
Excess of income over expenditure.....	262,158	356,760	258,954	494,016

Summary of Life Insurance in Canada, 1923.—In addition to the business transacted by life insurance companies incorporated by the Dominion Government to carry on business throughout the country, a considerable volume is also effected by companies operating under provincial licenses or otherwise permitted by the Provincial Governments to carry on such transactions. Statistics of these provincial companies have been collected since 1915 by the Department of Insurance. Table 86, showing policies issued and in force, premiums received and losses paid, as at Dec. 31, 1923, summarizes the volume of business done by both life companies and fraternal societies as Dominion and provincial licensees in that year.

86.—Dominion and Provincial Life Insurance in Canada, 1923.

Business transacted by	New policies issued (gross).	Net in force Dec. 31.	Net premiums received.	Net death claims paid.
	\$	\$	\$	\$
1. Dominion licensees—				
(a) Life companies.....	631,024,909	3,433,489,876	118,255,408	29,288,415
(b) Fraternal.....	16,941,886	188,236,069	3,980,890	3,561,531
Total.....	647,966,795	3,621,725,945	122,236,298	32,849,946
2. Provincial licensees—				
(a) Provincial companies within provinces by which they are incorporated—				
(i) Life companies.....	11,880,643	26,803,852	511,497	56,117
(ii) Fraternal.....	3,911,404	94,400,199	1,899,650	1,921,069
(b) Provincial companies in provinces other than those by which they are incorporated—				
(i) Life companies.....	4,106,928	12,687,346	250,865	29,208
(ii) Fraternal.....	2,072,679	55,769,967	688,867	640,537
Total for Provincial companies	21,971,654	189,661,364	3,359,879	2,646,931
Grand Total	669,938,449	3,811,387,309	125,587,177	35,496,877

3.—Miscellaneous Insurance.

Since 1875 the growth of insurance business other than fire and life has been a steady one. The report of the Superintendent of Insurance for the calendar year 1880 shows that the number of companies duly licensed for the transaction of accident, guarantee, plate glass and steam boiler insurance—the only four classes of miscellaneous insurance then transacted—was 5, 3, 1 and 1 respectively. The same report for the year 1923 shows that miscellaneous insurance now includes in Canada, accident, sickness, automobile, burglary, explosion, forgery, guarantee, hail, inland transportation, employers' liability, aviation, plate glass, sprinkler-leakage, steam boiler, title, tornado and live stock insurance, etc. Whereas in 1880, 10 companies transacted business of this kind, such insurance is now sold by 147 companies, of which 34 are Canadian and 113 British and foreign.

Accident Insurance.—The first license of this kind was issued to the Travelers Co., of Hartford, Conn., in 1868. The first license to a Canadian company was issued to the Accident Insurance Co. of Canada, which was organized in 1872 and commenced business in 1874. Much accident insurance has also been sold by companies doing primarily a life insurance business.

Automobile Insurance.—This is now one of the most important branches of the miscellaneous class of insurance. Premiums increased from \$80,446 in 1910 to \$573,604 in 1915 and to \$6,461,078 in 1923, with an increase in the number of companies from 7 to 92 during the 13-year period.

Plate Glass Insurance.—Policies were first sold in Canada by the Metropolitan Plate Glass Insurance Co., an American concern, which withdrew from Canada during 1882 to avoid business restrictions. The 39 companies operating in Canada in 1923 received premiums of \$661,947 and paid claims of \$232,782.

Burglary Insurance.—This type of insurance received but slight attention in Canada until 1918. In 1893, however, one company issued burglary policies. A second followed in 1905, and in 1910 five companies were operating, while at

the end of 1923, 31 companies were licensed to do burglary business. For 1923, the premium income of all companies amounted to \$714,933 and the losses paid amounted to \$560,518.

Hail Insurance.—Insurance against hailstorms is a class of business of comparatively recent development in Canada. During the year 1923, 39 insurance companies, comprising 6 Canadian, 10 British and 23 foreign, undertook this class of risk, the premiums written amounting to \$5,322,644 and the losses incurred to \$5,116,860. Claims outstanding at the end of the year amounted to \$6,358. The total premiums for the 14 years during which this business has been carried on in Canada amount to \$31,313,607 and the total losses to \$20,303,895. A complete list of the companies undertaking insurance against hail in Canada during the year 1923 is given on page cxxxix of Vol. I (Fire and Miscellaneous) of the Report for 1923 of the Superintendent of Insurance, Ottawa. (See also p. 268 of this volume.)

87.—Insurance other than Fire and Life, 1923.³

Types of Insurance.	Premiums received.	Losses incurred.	Unsettled Claims.	
			Not resisted.	Resisted.
	\$	\$	\$	\$
Guarantee (Fidelity).....	799,804	430,043	288,634	50,048
Guarantee (Surety).....	816,227	259,140	100,755	30,823
Personal Accident.....	2,567,557	1,144,035	276,892	9,050
Personal Accident and Sickness.....	1,480,637	802,808	121,109	250
Liability	2,583,440	1,842,486	860,549	68,018
Sickness.....	1,634,548	1,054,698	211,488	3,216
Burglary.....	714,933	560,518	145,243	40,751
Steam Boiler.....	360,084	12,457	8,834	8,000
Hail.....	5,322,643	5,119,327	6,529	—
Inland Transportation.....	288,430	121,801	15,443	—
Plate Glass.....	661,947	232,782	31,525	—
Automobile ¹	2,647,045	1,477,751	234,420	32,929
Automobile ²	3,814,033	1,537,048	478,976	81,874
Sprinkler-leakage.....	106,971	31,523	407	—
Live Stock.....	68,495	42,210	6,448	7,000
Tornado.....	202,459	90,351	8,907	—
Explosion.....	37,329	—	—	—
Forgery.....	23,060	14,539	6,515	—
Rain.....	46,583	33,355	187	—
Aviation.....	477	—	—	—
Credit.....	188,299	39,908	—	—
Electrical Machinery.....	41,063	32,173	9,551	—
Fraud.....	18,311	3,005	602	—

¹Including fire risk. ²Excluding fire risk. ³Dominion licensees only.

58.—Income and Expenditure and Assets and Liabilities of Canadian Companies doing only Insurance Business other than Fire and Life, 1923.

Companies.	Cash Income.	Cash Expenditure.	Excess of Income over Expenditure.	Assets.	Liabilities. ¹	Excess of Assets over Liabilities.
	\$	\$	\$	\$	\$	\$
Boiler Inspection.....	204,457	163,844	40,613	582,805	199,057	383,748
Chartered Trust and Executor Co.....	124,212	104,091	20,121	1,245,912	726,133	519,779
Fidelity Insurance Company.....	75,077	58,816	16,231	341,322	44,087	297,235
General Animals.....	52,227	13,623	8,603	93,868	27,174	66,694
Guarantee Co. of N. A.....	539,178	463,103	76,075	3,020,406	711,341	2,309,065
Merchants' and Employers' Guarantee and Accident.....	265,107	280,253	-15,146	197,071	131,612	65,459
Protective Association of Canada.....	302,831	278,057	24,775	197,927	105,939	91,988
Total.....	1,563,089	1,391,817	171,272	5,679,311	1,945,343	3,733,968

¹ Not including capital stock.

59.—Income and Expenditure in Canada of Companies, other than Canadian, doing only Insurance Business other than Fire and Life, 1923.

Companies.	Income (Cash.)			Expenditure (Cash.)			Excess of Income over Expenditure.
	Pre-miums.	Interest and Dividends earned.	Total Cash Income.	Net Losses incurred.	General Expenditure.	Total Cash Expenditure.	
	\$	\$	\$	\$	\$	\$	\$
Abeille.....	114,180	1,141	115,321	92,469	40,924	133,393	-18,072
Ætna Casualty.....	—	4,961	4,961	—	—	—	4,961
American and Foreign.....	10,777	—	10,777	154	3,110	3,264	7,513
American Credit Indemnity.....	89,052	1,365	90,417	2,429	37,775	40,204	50,213
American Surety.....	42,805	4,256	47,061	1,563	19,169	20,732	26,329
British and Foreign.....	4,790	4,680	9,470	946	229	1,175	8,295
Continental Casualty.....	622,971	17,885	640,856	360,505	301,053	661,558	20,702
Excess.....	50,628	—	50,628	41,167	17,046	58,213	7,585
Federal.....	48,103	45	48,148	44,445	20,878	65,223	17,175
Fidelity and Casualty.....	199,593	14,078	213,671	120,288	109,660	229,948	16,277
General Indemnity Corp. of America.....	104	924	1,028	—	1	1	1,027
Hartford Accident.....	140,427	10,220	150,647	73,326	59,655	132,981	17,666
Hartford Live Stock.....	35,541	2,673	38,214	19,235	16,911	36,146	2,068
Hartford Steam Boiler.....	1,200	2,500	3,700	—	—	—	3,700
Indemnity Insurance Co.....	181,927	4,500	186,427	88,879	60,755	150,634	35,793
International Fidelity.....	6,890	—	6,890	1,321	676	1,997	4,893
Lloyds Plate Glass.....	6,380	2,588	8,968	6,538	8,453	14,991	6,023
Loyal Protective.....	257,681	5,354	263,035	157,469	103,855	261,324	1,711
Lumbermen's Mutual Casualty.....	33,222	1,768	34,990	7,340	10,919	18,259	16,731
Maryland Casualty.....	280,044	23,514	303,558	131,756	114,693	246,449	57,109
Metropolitan Life.....	51,626	2,735	54,361	21,144	19,314	40,458	13,903
National Surety.....	368,901	15,914	384,815	229,140	179,400	408,540	-23,725
New York Plate Glass.....	17,286	1,510	18,796	6,138	8,271	14,409	4,387
Preferred Accident.....	67,082	2,892	69,974	21,275	38,362	59,637	10,337
Ridgely Protective.....	80,182	1,871	82,053	49,508	32,117	81,625	428
Royal Indemnity.....	74,334	19,074	93,458	88,955	47,641	136,596	-43,138
Travelers Indemnity.....	500,779	31,013	531,795	250,822	221,408	472,231	59,564
United States Fidelity and Guaranty.....	644,436	36,900	681,336	428,312	291,678	719,990	-38,654
Western Casualty.....	37,797	—	37,797	10,006	29,341	39,347	-1,550
Total.....	3,968,786	214,361	4,183,149	2,256,127	1,793,297	4,049,424	133,725

99.—Dominion and Provincial Insurance in Canada, other than Fire and Life, 1923.

NET PREMIUMS RECEIVED.

Class of business.	Dominion Licensees.	Provincial Licensees.			Grand Total.
		(a) Prov. Cos. within provinces by which they are incorp.	(b) Prov. Cos. in provinces other than those by which they are incorp.	Total Provincial Licensees.	
	\$	\$	\$	\$	\$
Accident.....	2,567,557	—	—	—	2,567,557
Accident and Sickness combined.....	1,480,637	67,848	18,593	86,441	1,567,078
Automobile (including fire risk).....	2,647,045	158,244	134,189	292,433	2,939,478
Automobile (excluding fire risk).....	3,814,033	160,395	92,259	252,754	4,066,787
Aviation.....	477	—	—	—	477
Burglary.....	714,933	19,062	103	19,165	734,098
Credit.....	188,299	—	—	—	188,299
Electrical Machinery.....	41,063	—	—	—	41,063
Explosion.....	37,329	—	—	—	37,329
Forgery.....	23,060	—	—	—	23,060
Fraud.....	18,311	—	—	—	18,311
Guarantee (Fidelity).....	799,804	31,408	6,131	37,539	1,653,570
Guarantee (Surety).....	816,227	—	—	—	816,227
Hail.....	5,322,643	61,092	—	61,092	5,383,735
Inland Transportation.....	288,430	2,509	492	3,001	291,431
Liability.....	2,853,440	198,468	1,821	200,289	3,053,729
Live Stock.....	68,495	—	—	—	68,495
Plate Glass.....	661,947	147,074	7,448	154,522	816,469
Rain.....	46,583	—	—	—	46,583
Sickness.....	1,634,548	—	—	—	1,634,548
Sprinkler-leakage.....	106,971	—	—	—	106,971
Steam Boiler.....	360,084	—	—	—	360,084
Tornado.....	202,459	—	—	—	202,459
Weather.....	—	84,396	—	84,396	84,396
Total.....	24,694,375	930,496	261,136	1,191,632	25,886,007

NET LOSSES PAID.

	\$	\$	\$	\$	\$
Accident.....	1,144,035	—	—	—	1,144,035
Accident and Sickness combined.....	802,808	33,322	12,268	45,590	848,298
Automobile (including fire risk).....	1,477,751	50,647	139	50,786	1,528,537
Automobile (excluding fire risk).....	1,537,048	67,217	25,537	92,754	1,629,802
Aviation.....	—	—	—	—	—
Burglary.....	560,518	9,041	—	9,041	569,559
Credit.....	39,908	—	—	—	39,908
Electrical Machinery.....	32,173	—	—	—	32,173
Explosion.....	—	—	—	—	—
Forgery.....	14,539	—	—	—	14,539
Fraud.....	3,005	—	—	—	3,005
Guarantee (Fidelity).....	430,043	8,031	2,446	10,477	699,660
Guarantee (Surety).....	259,140	—	—	—	259,140
Hail.....	5,119,327	206,237	—	206,237	5,325,564
Inland Transportation.....	121,801	413	—	413	122,214
Liability.....	1,842,486	108,437	761	109,198	1,951,684
Live Stock.....	42,210	—	—	—	42,210
Plate Glass.....	232,782	57,378	2,967	60,345	293,127
Rain.....	33,355	—	—	—	33,355
Sickness.....	1,054,698	—	—	—	1,054,698
Sprinkler-leakage.....	31,523	—	—	—	31,523
Steam Boiler.....	12,457	—	—	—	12,457
Tornado.....	90,351	—	—	—	90,351
Weather.....	—	72,537	—	72,537	72,537
Total.....	14,881,958	613,260	44,118	657,378	15,539,336

91.—Dominion and Provincial Insurance in Canada, other than Fire and Life, 1923.

Business transacted by	Net premiums written.	Net losses incurred.
	\$	\$
1. Dominion licensees.....	24,694,375	14,881,958
2. Provincial licensees—		
(a) Provincial companies within provinces by which they are incorporated.....	930,496	613,260
(b) Provincial companies within provinces other than those by which they are incorporated.....	261,136	44,118
Total for Provincial Companies.....	1,191,632	657,378
Grand Total.....	25,886,007	15,539,336

4.—Government Annuities.

During the early years of the 20th century, there took place throughout the civilized world a distinct movement in favour of ameliorating the living conditions of the less well-off members of society. One form which this movement took in the United Kingdom was that of old age pensions, granted by the State as a free gift to its poorer citizens whose earnings were very generally insufficient to permit of a margin of saving. In Canada, where wages were higher and a margin of saving consequently existed, the movement took the form of providing, through the establishment of Government annuities, an absolutely safe investment for such savings, which had only too often been lost through the inexperience of their owners, leaving the latter a burden upon the charity of relatives or of the public.

Under the Government Annuities Act, 1908 (7-8 Edw. VII, c. 5), as amended by the Act of 1920, His Majesty the King, represented by the Minister (at present the Minister of Labour), may sell to persons over the age of five years, domiciled or resident in Canada, immediate or deferred annuities of not less than \$50 nor more than \$5,000 (1) for the life of the annuitant, (2) for a term of years certain, not exceeding twenty years, or for the life of the annuitant, whichever period shall be the longer, or (3) an immediate or deferred annuity to any two persons domiciled in Canada during their joint lives, and with or without continuation to the survivor. The property and interest of any annuitant in any contract for an annuity is neither transferable nor attachable. The purchaser may contract that, in the event of the death of the annuitant before the date fixed for the annuity to begin, all money paid shall be refunded to the purchaser or his legal representatives with interest at the rate of 4 p.c., compounded yearly.

Statistics of the annuities in force on March 31, 1923 and 1924, are given in Tables 92 and 93. From September 1, 1908, to March 31, 1924, 5,465 annuities had been issued. On March 31, 1924, 1,588 immediate annuities and 3,877 deferred annuities were in force. The total value of these annuities on that date was \$7,162,972, and the amount of annuities purchased was \$1,545,401.

92.—Government Annuities Fund Statement, March 31, 1923 and 1924.

Items.	Years ended March 31.	
	1923.	1924.
ASSETS.		
Fund at beginning of year.....	\$ 5,005,424	\$ 5,892,605
Receipts during the year, less payments.....	887,180	1,270,367
Fund at end of year.....	5,892,604	7,162,972
LIABILITIES.		
Net present value of all outstanding contracts.....	5,892,604	7,162,972
RECEIPTS.		
For Immediate Annuities.....	807,390	1,156,891
For Deferred Annuities.....	221,337	302,152
Interest on Fund.....	208,684	249,633
Amount transferred by Government to maintain reserve.....	49,655	61,573
Total Receipts.....	1,287,066	1,770,249
PAYMENTS.		
Annuities paid under Immediate Contracts.....	386,527	476,256
Return of Premiums with Interest.....	12,985	23,403
Return of Premiums without Interest.....	374	223
Balance at end of year.....	887,180	1,270,367
Total Payments.....	1,287,066	1,770,249

93.—Valuation on March 31, 1923 and 1924, of Annuity Contracts issued pursuant to the Government Annuities Act, 1908.

Description of Contracts.	1923.			1924.		
	Number.	Amount of Annuities.	Total value on Mar. 31, 1923, of Annuities purchased.	Number.	Amount of Annuities.	Total value on Mar. 31, 1924, of Annuities purchased.
1—Immediate Annuities.....	862	\$ 298,586	\$ 2,333,840	1,017	\$ 382,295	\$ 3,052,397
2—Guaranteed Annuities.....	357	79,359	705,905	408	91,463	829,666
3—Last Survivor Annuities.....	146	58,322	581,589	163	77,719	787,450
4—Def. " " Annuities.....	1,171	260,601	664,271	1,215	281,106	700,099
5—Def. "A" Guaranteed Annuities.....	2,019	467,228	929,532	2,041	486,890	1,031,553
6—Def. "A" Last Survivor Annuities.....	64	29,173	110,635	74	33,917	143,658
7—Def. "B" Last Survivor Annuities.....	27	12,584	45,645	34	17,892	54,923
8—Def. "B" Annuities.....	491	158,206	521,187	513	174,119	593,226
Total.....	5,137	1,364,059	5,892,604	5,465	1,545,401	7,162,972

IV.—COMMERCIAL FAILURES.

Commercial Failures in Canada, 1923.—According to Bradstreet's of January, 1924, the total number of Canadian failures reported during the calendar year 1923 was 2,915, with liabilities of \$50,623,425, as against 3,185, with liabilities of \$55,047,342, in 1922. In number there was a decrease in 1923 of 8.4 p.c. as compared with 1922, while the liabilities decreased by over 8.0 p.c. Dun's Review of January, 1924, gives the total number of Canadian insolvencies in 1923 as 3,247, as compared with 3,695 in 1922, whilst liabilities reached in 1923 the total of \$65,310,382, as compared with \$78,068,959 in 1922. Tables 94 to 99 give statistics from both authorities, those from Bradstreet's (in Table 94) being classified by provinces for the calendar years 1922 and 1923, and those from Dun's Review by

branches of business for the calendar years 1921 to 1923 (Table 95), and by classes and provinces for the calendar year 1923, with totals for the years 1909 to 1922, in Table 96. An analysis by causes of failures for 1922 and 1923 is given in Table 97 (Bradstreet's).

94.—Commercial Failures in Canada, by Provinces, and Newfoundland, for the calendar years 1922 and 1923. [From Bradstreet's.]

Provinces.	Number of Failures.		Assets.		Liabilities.	
	1922.	1923.	1922.	1923.	1922.	1923.
			\$	\$	\$	\$
Prince Edward Island.....	12	10	75,056	68,216	175,222	122,397
Nova Scotia.....	114	159	1,332,128	1,117,536	1,980,271	3,804,800
New Brunswick.....	66	41	537,302	309,375	926,954	518,394
Quebec.....	1,255	992	9,370,023	7,567,454	24,263,215	20,059,157
Ontario.....	759	768	5,476,319	5,999,894	12,879,192	12,672,749
Manitoba.....	369	344	1,617,905	1,510,699	4,583,747	4,968,286
Saskatchewan.....	231	264	1,834,823	2,237,479	2,939,064	3,137,562
Alberta.....	194	155	2,376,864	1,103,003	3,706,796	2,556,744
British Columbia.....	185	182	1,312,716	1,481,473	3,592,881	2,783,336
Canada.....	3,185	2,915	23,933,136	21,395,129	55,047,342	50,623,425
Newfoundland.....	64	46	1,315,133	2,020,836	2,200,004	2,923,061

95.—Commercial Failures in Canada, by Branches of Business, 1921-1923.
[From Dun's Review.]

Classes.	1921.		1922.		1923.	
	Num-ber.	Liabilities.	Num-ber.	Liabilities.	Num-ber.	Liabilities.
		\$		\$		\$
Manufacturers—						
Iron and Foundries.....	11	1,264,578	17	873,211	11	866,492
Machinery and Tools.....	28	7,138,818	60	10,430,493	72	5,068,100
Woollens, Carpets, etc.....	7	124,104	4	23,648	7	608,992
Cotton, Hosiery, etc.....	3	926,743	7	101,467	4	265,658
Lumber, Carpenters.....	85	2,041,646	134	4,860,837	107	3,804,630
Clothing, Millinery.....	127	6,429,289	148	3,614,203	132	3,782,297
Hats, Gloves and Furs.....	21.	705,049	26	1,592,206	21	816,536
Chemicals and Drugs.....	9	166,409	7	48,155	11	179,124
Paints and Oils.....	2	38,204	2	54,522	3	8,500
Printing and Engraving.....	14	113,154	30	329,816	25	343,886
Milling and Bakers.....	47	1,710,511	54	763,253	48	731,548
Leather, Shoes, etc.....	17	811,232	30	7,586,389	37	687,468
Liquors and Tobacco.....	12	467,514	19	386,885	19	925,533
Glass, Earthenware.....	4	93,800	7	319,302	8	1,322,158
All other.....	172	11,945,739	312	8,096,404	287	12,382,410
Total Manufacturers.....	559	33,976,790	857	39,080,791	792	31,791,332
Traders—						
General Stores.....	426	7,815,984	488	6,408,569	342	8,775,925
Groceries and Meats.....	427	4,093,626	582	3,970,646	541	3,275,026
Hotels, Restaurants.....	66	819,457	146	1,117,053	156	1,097,226
Liquors and Tobacco.....	33	813,884	38	184,547	43	199,365
Clothing, Furnishing.....	179	2,021,322	333	4,614,129	240	3,121,149
Dry Goods and Carpets.....	157	3,460,304	226	4,690,282	179	3,862,991
Shoes, Rubbers and Trunks.....	84	1,589,683	138	3,401,415	143	2,742,751
Furniture, Crockery.....	18	217,875	49	660,731	47	784,915
Hardware, Stoves and Tools.....	36	439,580	62	716,338	79	1,339,108
Chemicals and Drugs.....	18	143,417	46	315,130	52	388,702
Paints and Oils.....	5	64,067	8	154,422	8	38,932
Jewelry and Clocks.....	25	223,149	53	267,244	51	501,371
Books and Papers.....	24	181,726	26	135,496	31	144,776
Hats, Furs and Gloves.....	18	1,203,496	25	537,759	25	397,836
All other.....	223	6,798,999	497	5,830,442	382	4,669,690
Total Traders.....	1,739	29,886,569	2,717	33,004,203	2,319	31,339,763
Agents and Brokers.....	153	9,435,752	121	5,983,965	136	2,679,287
Total.....	2,451	73,299,111	3,695	78,068,959	3,247	65,310,382

96.—Commercial Failures in Canada, by Provinces and Classes, for 1923, with totals for 1909-1922. [From Dun's Review.]

Provinces.	Total Commercial.			Manufacturing.	
	Num-ber.	Assets.	Liabilities.	Num-ber.	Liabilities.
		\$	\$		\$
Prince Edward Island.....	20	102,700	404,630	1	18,000
Nova Scotia.....	146	616,723	2,110,356	25	793,200
New Brunswick.....	55	532,616	612,382	8	127,888
Quebec.....	1,171	19,755,477	30,969,750	332	17,481,324
Ontario.....	844	11,954,270	14,174,683	259	8,470,956
Manitoba.....	382	4,272,052	5,021,200	58	2,026,589
Saskatchewan.....	252	1,668,665	2,056,142	17	72,311
Alberta.....	165	4,642,368	3,684,460	25	866,623
British Columbia.....	162	1,935,345	2,820,094	60	1,955,341
Total, 1923.....	3,247	46,833,195	65,810,382	792	31,791,332
Newfoundland.....	50	1,352,979	3,956,685	7	39,100
Total, 1922.....	3,695	63,097,789	78,068,959	857	39,080,791
" 1921.....	2,451	57,158,397	73,299,111	559	33,976,790
" 1920.....	1,078	18,569,516	26,494,301	255	15,871,216
" 1919.....	755	10,741,441	16,256,259	213	10,234,477
" 1918.....	873	11,251,341	14,502,477	232	8,248,807
" 1917.....	1,097	13,051,900	18,241,465	261	7,455,094
" 1916.....	1,685	19,670,542	25,069,534	363	8,796,646
" 1915.....	2,661	39,526,358	41,162,321	655	13,877,414
" 1914.....	2,898	30,909,563	35,045,095	614	11,063,191
" 1913.....	1,719	12,658,979	16,979,406	452	6,792,763
" 1912.....	1,357	8,783,409	12,316,936	323	4,556,615
" 1911.....	1,332	9,964,604	13,491,196	321	4,760,016
" 1910.....	1,262	11,013,396	14,514,650	292	7,030,227
" 1909.....	1,442	10,318,511	12,982,800	354	3,933,938

Provinces.	Trading.		Other Commercial.		Banking.	
	Num-ber.	Liabilities.	Num-ber.	Liabilities.	Num-ber.	Liabilities.
		\$		\$		\$
Prince Edward Island.....	19	386,630	—	—	—	—
Nova Scotia.....	118	1,302,332	3	14,824	—	—
New Brunswick.....	47	484,494	—	—	—	—
Quebec.....	797	11,703,982	42	1,784,444	—	—
Ontario.....	545	5,351,728	40	351,999	1	18,500,000
Manitoba.....	300	2,886,401	24	108,210	—	—
Saskatchewan.....	230	1,966,035	5	17,796	—	—
Alberta.....	130	2,785,079	10	92,758	—	—
British Columbia.....	95	786,467	7	78,286	—	—
Total, 1923.....	2,319	31,339,763	136	2,679,287	1	18,500,000
Newfoundland.....	38	3,686,615	5	230,970	—	—
Total, 1922.....	2,717	33,004,203	121	5,983,965	4	222,480
" 1921.....	1,739	29,886,569	153	9,435,752	1	45,233
" 1920.....	771	7,704,505	52	2,918,580	—	—
" 1919.....	494	4,475,628	48	1,546,154	—	—
" 1918.....	590	5,142,397	51	1,111,273	—	—
" 1917.....	777	8,417,239	59	2,369,132	—	—
" 1916.....	1,237	12,290,368	85	3,982,520	—	—
" 1915.....	1,888	21,696,890	118	5,558,017	1	150,000
" 1914.....	2,164	18,677,935	120	5,303,968	1	250,000
" 1913.....	1,216	8,681,419	51	1,505,224	1	125,000
" 1912.....	975	6,906,665	59	853,656	—	—
" 1911.....	986	7,606,891	5	1,124,289	1	71,194
" 1910.....	947	6,943,579	23	540,850	2	2,546,871
" 1909.....	1,059	7,867,287	29	1,181,575	—	—

NOTE.—Newfoundland included in totals, 1909-1922.

97.—Causes of Failures in Canada and the United States by Numbers and Percentages, years ended December 31, 1922 and 1923. [From Bradstreet's]

IN CANADA (including Newfoundland and St. Pierre-Miquelon).

Failures due to	Number.		Assets.		Liabilities.	
	1922.	1923.	1922.	1923.	1922.	1923.
	No.	No.	\$	\$	\$	\$
Incompetence.....	768	716	3,251,707	6,462,917	7,466,371	13,571,811
Inexperience.....	113	139	449,321	470,890	1,075,100	1,122,922
Lack of capital.....	1,229	1,149	11,306,790	7,629,977	26,196,599	19,947,704
Unwise credits.....	32	41	308,853	250,641	937,534	708,012
Failures of others.....	24	18	204,119	412,108	553,567	2,011,942
Extravagance.....	8	5	186,120	4,767	321,545	9,967
Neglect.....	56	61	193,926	153,159	436,886	504,147
Competition.....	22	13	194,700	57,341	664,753	121,059
Specific conditions.....	800	635	7,802,399	7,300,319	13,704,274	12,455,514
Speculation.....	26	20	350,183	186,774	1,034,008	595,887
Fraud.....	169	164	1,113,976	870,597	3,989,256	3,519,762
Total.....	3,247	2,961	25,362,094	23,799,490	56,379,887	54,568,727

IN UNITED STATES.

Incompetence.....	7,666	6,448	72,631,096	63,901,578	140,241,850	126,313,880
Inexperience.....	1,062	902	6,808,250	11,054,870	12,244,659	17,039,991
Lack of capital.....	6,912	6,562	80,843,584	111,739,495	158,575,479	200,640,351
Unwise credits.....	292	223	5,791,966	18,186,184	9,570,876	22,880,544
Failures of others.....	278	297	7,856,990	17,076,924	16,139,150	28,912,045
Extravagance.....	148	259	1,589,500	6,035,465	3,526,794	9,590,491
Neglect.....	236	231	4,376,378	1,182,671	6,562,221	2,944,249
Competition.....	250	262	5,354,535	2,367,746	8,092,894	4,229,271
Specific conditions.....	4,686	3,116	157,311,140	111,290,269	241,071,706	168,216,699
Speculation.....	55	63	6,362,127	9,259,283	11,636,992	12,997,036
Fraud.....	830	796	16,687,688	17,059,933	42,185,759	37,460,237
Total.....	22,415	19,159	365,618,254	369,154,418	649,848,380	631,224,794

PERCENTAGES OF NUMBER OF FAILURES AND LIABILITIES, CLASSIFIED BY CAUSE.

Failures due to	Canada per cent.				United States per cent.			
	Number.		Liabilities.		Number.		Liabilities.	
	1922.	1923.	1922.	1923.	1922.	1923.	1922.	1923.
Incompetence.....	23.6	24.2	13.2	24.9	34.2	33.7	21.6	20.0
Inexperience.....	3.5	4.7	1.9	2.1	4.7	4.7	1.9	2.7
Lack of capital.....	37.8	38.8	40.5	36.5	30.8	34.2	24.4	31.8
Unwise credits.....	1.0	1.4	1.6	1.3	1.3	1.2	1.5	3.6
Failures of others.....	0.8	0.6	1.0	3.7	1.2	1.5	2.5	4.6
Extravagance.....	0.3	0.2	0.6	0.02	0.7	1.3	0.6	1.5
Neglect.....	1.7	2.1	0.8	0.9	1.1	1.2	1.0	0.5
Competition.....	0.7	0.4	1.2	0.2	1.1	1.4	1.2	0.7
Specific conditions.....	24.6	21.4	24.3	22.9	20.9	16.3	37.0	26.6
Speculation.....	0.8	0.7	1.8	1.1	0.3	0.3	1.8	2.1
Fraud.....	5.2	5.5	7.1	6.4	3.7	4.2	6.5	5.9

Analysis of Commercial Failures.—In Tables 98 and 99 Bradstreet's and Dun's records of commercial failures are analyzed by Kemmerer's method. First, the total of concerns failing is stated as a percentage of those in business, and this percentage is then stated as an index number with 1900 as the base year. Then the assets and liabilities are stated, with the average liabilities per failure, since failures are more disastrous in proportion as the liabilities are larger. Next, the average liabilities per failure are stated as an index number, with 1900 as the base year. The percentage of liabilities to assets is also given, and, finally, the index number indicating the proportion of failures to the number of concerns in business and the index number indicating the size of the liabilities are averaged, and the result is given as the barometer of business depression. This number reversed, *i.e.*, subtracted from 200, is given as a barometer of business confidence. The records of Bradstreet and Dun are not on the same basis, but the general tendency of the two records is the same.

98.—Commercial Failures and Business Confidence in Canada, 1900-1923. [Bradstreet]

Years.	Number of Concerns.				Assets.	Liabilities.			Index Number of Business.		
	Doing Business.	Failing.	Proportion Failing.			Total.	Average.				Percent- age of liabilities to assets.
			Percentage.	Index No.			Amount.	Index No.			
No.	No.	p.c.		\$	\$	\$			Depres- sion.	Confi- dence.	
1900.....	100,618	1,337	1.32	100.0	4,246,693	10,785,601	8,067	100.0	254	100.0	100.0
1901.....	103,421	1,379	1.33	100.7	5,264,551	11,783,837	8,545	105.9	224	103.3	96.8
1902.....	106,069	1,095	1.03	78.0	3,602,542	8,546,365	7,805	96.7	237	87.3	112.7
1903.....	108,215	958	0.88	66.6	3,870,605	8,372,011	8,739	108.3	216	87.4	112.6
1904.....	110,615	1,175	1.06	80.3	4,137,418	10,019,311	8,527	105.7	242	93.0	107.0
1905.....	114,335	1,430	1.25	94.7	6,584,191	13,879,700	9,706	120.3	211	107.5	92.5
1906.....	112,362	1,239	1.10	83.3	4,305,076	9,450,093	7,627	94.5	219	88.9	111.1
1907.....	116,202	1,365	1.17	86.6	5,276,698	11,735,272	8,597	106.6	222	96.6	103.4
1908.....	118,875	1,715	1.44	109.1	7,770,207	17,582,304	10,252	127.1	236	118.1	81.9
1909.....	123,232	1,588	1.28	96.9	6,195,515	12,811,184	8,067	100.0	207	98.4	101.6
1910.....	128,881	1,469	1.14	86.3	7,075,347	15,712,586	10,696	132.6	222	109.4	90.6
1911.....	130,446	1,401	1.07	81.0	6,420,331	13,086,946	9,341	115.8	204	98.4	101.6
1912.....	142,583	1,312	0.92	69.7	5,611,675	12,355,282	9,417	116.7	220	93.2	106.8
1913.....	149,852	1,827	1.21	91.6	8,140,990	16,650,450	9,113	112.9	204	102.2	97.8
1914.....	155,849	2,886	1.85	140.1	13,507,536	30,693,658	10,635	131.8	227	135.9	64.1
1915.....	156,008	2,621	1.68	127.3	14,227,192	32,134,312	12,260	152.0	226	139.6	60.4
1916.....	156,535	1,772	1.13	85.6	6,349,078	15,952,684	9,003	111.6	251	98.6	101.4
1917.....	153,079	1,109	0.72	54.5	6,207,512	13,616,822	12,278	152.2	219	103.3	96.7
1918.....	152,974	814	0.53	40.1	5,354,727	12,413,536	15,250	189.0	232	114.5	85.5
1919.....	156,187	625	0.40	30.3	5,089,534	10,095,232	16,152	200.2	198	115.2	84.8
1920.....	161,049	966	0.59	44.7	10,478,465	20,808,053	21,540	267.0	199	155.8	44.2
1921.....	171,415	2,350	1.37	103.8	21,489,236	48,553,757	20,637	255.8	236	179.8	20.2
1922.....	173,080	3,185	1.84	139.4	23,933,136	55,047,842	17,283	214.2	230	176.8	23.2
1923.....	176,739	2,915	1.61	122.0	21,295,129	50,623,425	17,367	215.3	237	168.7	31.3

Note.—Newfoundland included, 1900-1913 inclusive.

99.—Commercial Failures and Business Confidence in Canada, 1900-1923. [Dun.]

Years.	Number of Concerns.				Assets.		Liabilities.			Index Number of Business	
	Doing Business.	Failing.	Proportion Failing.		Total.	Average.		Percent- age of liabilities to assets.	Depres- sion.	Confi- dence.	
			Percentage.	Index No.		Amount.	Index No.				
No.	No.	p.c.		\$	\$		p.c.				
1900.....	95,772	1,355	1.41	100.0	8,202,898	11,613,208	8,570	100.0	100.0	100.0	
1901.....	96,961	1,341	1.38	97.8	7,686,823	10,811,671	8,062	94.1	141	95.9	
1902.....	93,890	1,101	1.17	82.9	7,772,418	10,934,777	9,931	115.9	141	99.4	
1903.....	95,029	1,978	1.03	73.0	4,872,422	7,552,724	7,723	90.1	155	81.5	
1904.....	96,822	1,246	1.29	91.5	8,555,875	11,394,117	9,145	106.7	133	99.1	
1905.....	101,246	1,347	1.33	94.3	6,822,005	9,854,659	7,316	85.4	144	110.2	
1906.....	104,576	1,184	1.13	80.1	6,499,052	9,085,773	7,673	89.5	140	84.8	
1907.....	108,160	1,278	1.18	83.7	9,443,227	13,221,250	10,345	120.7	140	102.2	
1908.....	113,551	1,640	1.44	102.1	12,008,113	14,981,790	9,105	106.2	124	104.2	
1909.....	117,809	1,442	1.23	87.2	10,318,511	12,982,800	9,003	105.0	126	96.1	
1910.....	110,764	1,262	1.05	74.4	11,013,396	14,514,650	11,501	134.2	132	104.3	
1911.....	129,917	1,332	1.03	73.0	9,964,404	13,491,196	10,128	118.2	135	95.6	
1912.....	132,469	1,357	1.02	72.3	8,783,409	12,316,396	9,076	105.9	140	89.1	
1913.....	141,135	1,719	1.22	86.5	12,658,979	16,979,406	9,877	115.2	134	100.8	
1914.....	149,999	2,892	1.93	136.9	30,888,363	34,996,694	12,101	141.2	113	139.0	
1915.....	150,378	2,652	1.76	124.8	39,243,653	40,676,621	15,338	179.0	104	48.1	
1916.....	147,575	1,677	1.14	80.8	19,640,703	24,985,908	14,899	173.9	127	127.3	
1917.....	142,431	1,088	0.76	53.9	12,994,179	18,108,347	16,643	194.2	139	124.0	
1918.....	141,709	873	0.62	43.9	11,246,341	14,502,477	16,612	193.8	129	118.8	
1919.....	142,919	751	0.53	37.6	10,731,541	16,224,259	21,603	252.1	151	55.2	
1920.....	151,203	1,034	0.68	48.2	17,501,332	24,719,111	23,906	278.9	141	163.5	
1921.....	154,608	2,379	1.54	109.2	55,114,487	68,947,140	28,982	338.2	125	223.7	
1922.....	166,435	3,630	2.18	154.6	62,424,514	76,314,674	21,023	245.3	122	199.9	
1923.....	167,525	3,197	1.91	135.5	5,480,216	61,853,697	19,347	225.8	136	180.7	

NOTE.—Newfoundland included, 1900-1913 inclusive.

Assignments under the Bankruptcy Act.—Under the Bankruptcy Act of 1919 (9-10 George, V, c. 36), which went into force on July 1, 1920, certain documents relative to all failures coming under the Act are forwarded to the Dominion Statistician. Statistics based upon these documents have been duly compiled in the Dominion Bureau of Statistics and are published in Table 100. In the consideration of these statistics it should be remembered that changes in the Act, effective from October 1, 1923, have had slight effects on the comparability of the figures. It may, however, be pointed out that since the early months of 1923 there has been a decided decrease in the number of failures.

100.—Assignments under the Bankruptcy Act, by Months, 1920-1924.

Months.	1920. ¹	1921.	1922.	1923.	1924. ²
January.....	—	228	374	387	291
February.....	—	170	340	355	260
March.....	—	171	340	368	223
April.....	—	132	245	324	180
May.....	—	155	309	291	179
June.....	—	156	288	271	147
July.....	49	169	300	149	155
August.....	73	186	272	242	129
September.....	68	214	332	320	153
October.....	97	228	364	200	184
November.....	117	267	410	259	219
December.....	169	288	351	242	199
Total.....	573¹	2,364	3,925	3,408	2,319

¹ Six months. ²Subject to revision.

By provinces, the failures in 1921, 1922, 1923 and 1924 have been in order as follows, the figures for 1924 being provisional: Prince Edward Island, 11, 15, 16, 3; Nova Scotia, 108, 121, 155, 69; New Brunswick, 56, 131, 67, 67; Quebec, 928, 1,589, 1,181, 907; Ontario, 650, 1,058, 970, 835; Manitoba, 147, 284, 258, 100; Saskatchewan, 177, 272, 280, 131; Alberta, 189, 299, 323, 150; British Columbia, 98, 156, 158, 57.

X.—EDUCATION.

I.—GENERAL EDUCATION.

Throughout the Dominion of Canada public education is a matter of provincial concern. Before Confederation, the maritime colonies were separated from Ontario by French-speaking Quebec, and in each of these an educational system specially adapted to the local conditions had come into existence. When Confederation was under consideration, the protection of existing vested rights was the predominant consideration. As a result, section 93 of the British North America Act, which embodies the Canadian constitution in so far as that constitution is a written one, provides that in and for each province the Legislature may exclusively make laws in respect of education, except that "nothing in any such law shall prejudicially affect any right or privilege with respect to denominational schools which any class of persons have by law in the province at the union."

Inasmuch as the administration of public education is one of the chief functions of Provincial Governments, there is in each of the provinces, except Quebec, a Department of Education, administered either by a member of the Provincial Executive Council or by the Executive Council as a whole. In practice, however, the routine administration is in the hands of the permanent officials of the Department of Education, who are members of the permanent civil service. In Quebec, the Superintendent of Public Instruction, appointed by the Government, is *ex officio* President of the Council of Public Instruction; the link between the Department of Public Instruction and the Government is the Provincial Secretary; there are also two Deputy Heads, called the French and English Secretaries of the Department.

Since the Departments of Education are permanent authorities, controlled as to the details of administration by permanent officials, educational policy is relatively permanent; further, the control of the Government over education throughout the province is relatively stronger than in the United States. A capable Deputy Minister or Superintendent of Education impresses his personality and his views upon the whole system of his province, especially as in practice he controls the payment of Government grants, which constitute an important part of the revenues applied to educational purposes. (In 1923, out of a total expenditure on public general education in Canada amounting to \$121,494,736, \$15,186,006 came from the Provincial Governments.)

The Department of Education in each province naturally has its headquarters at the capital of the province. Its local representatives are the school inspectors, who, in all provinces except Ontario, are appointed and paid by the Government; in Ontario high and separate school inspectors are appointed and paid by the Government, while public school inspectors, except in the unorganized districts, are appointed by the county or city municipality from among the persons recognized by the Department of Education as qualified for such appointment, and after appointment receive a part of their salary from the municipality and a part from the province.

Education in Quebec.—In Quebec there are two distinct systems of education in each of which the teaching of religion takes a prominent position—the Protestant and the Roman Catholic systems. In the former, which is under the control of the Protestant Committee of the Council of Public Instruction, with an English Secretary, the curriculum and the general system of education is similar to that in the other provinces, except that the highest grade is Grade XI, from which

students are matriculated to McGill University and Bishop's College, the two Protestant English-speaking universities of the province.

In the Roman Catholic schools, which are mainly French-speaking, as the Protestant schools are English-speaking, the administration is in the hands of the Catholic Committee of the Council of Public Instruction, with a French Secretary. General elementary training is given by means of a curriculum, extending over eight "years", some of which require more than a year to complete, the work of the eighth "year" corresponding in a general way to the work of Grade X, as that work is generally understood.

Recent Developments in Education.—In recent years there has been a tendency to lengthen the period of compulsory attendance and to enforce the law. This tendency has been most marked in Ontario, where in 1919 an Act was passed providing: (1) that children 8 to 14 must attend full time and that children from 5 to 8, once enrolled, must attend full time to the end of the school term for which they are enrolled; (2) that adolescents from 14 to 16 who have not attained university matriculation standing must attend full time; those exempted owing to circumstances requiring them to go to work must attend part time *during the ordinary working day* for 400 hours a year in municipalities providing part-time courses, which all municipalities of 5,000 population and upwards *must* do from September, 1922, smaller municipalities having an option in the matter. Further, those who have not attended full time up to 16 are required, after September, 1923, to attend 320 hours a year of part-time courses up to age 18. In other words, an Ontario adolescent has the alternative of full time attendance to 16 or full time attendance to 14 plus part-time attendance to 18. The operation of this Act has greatly increased the attendance in Ontario secondary schools.

Further, as a result of the keeping of children in school to a more advanced age, increasing attention has naturally been devoted to technical education of various kinds, especially as required by those students who are not adapted to higher intellectual work. The number taking technical training of some kind or other is rapidly increasing.

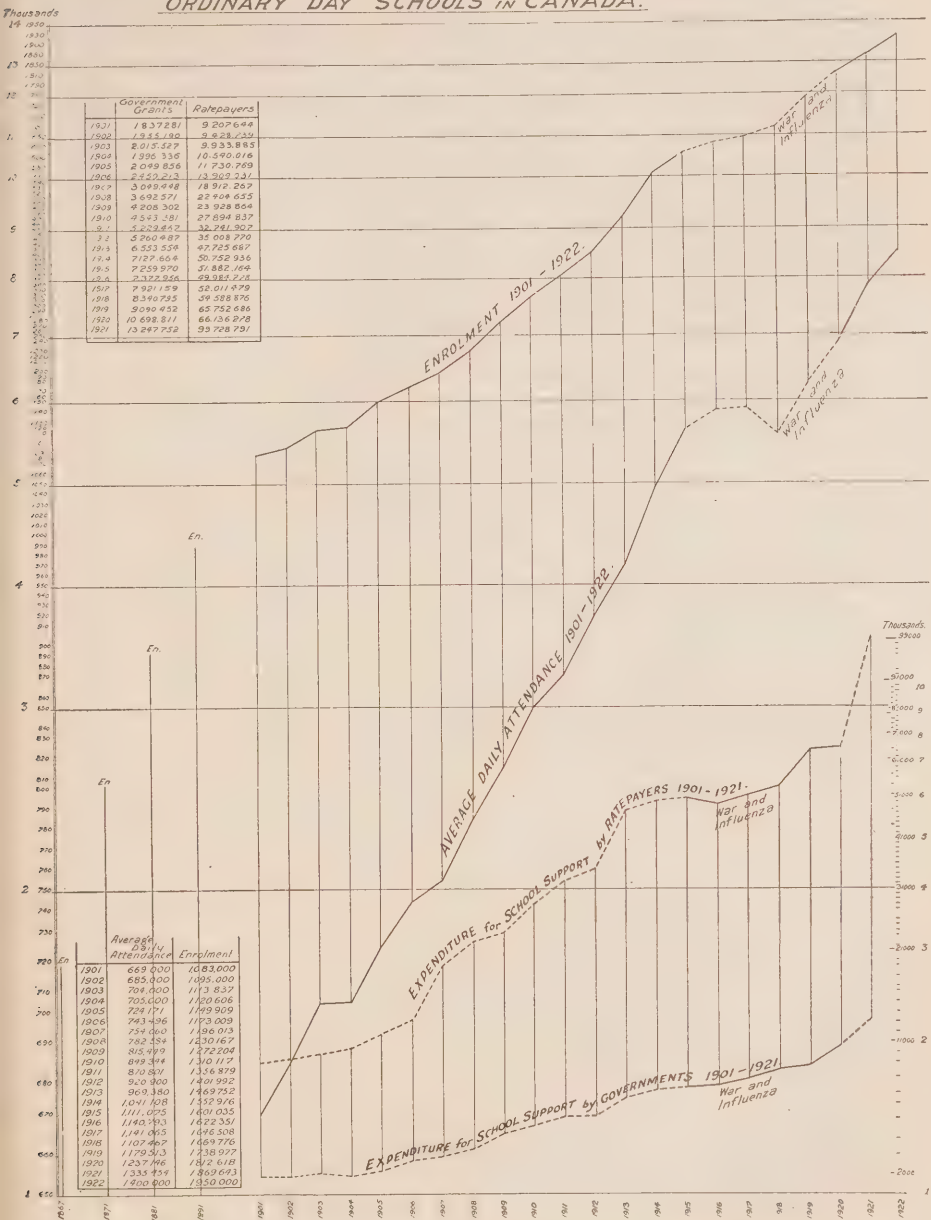
Details are given in sub-section II of this section, dealing with "Vocational and Technical Education".

Statistics of General Education.—The statistical tables on education in Canada commence with a statistical summary (Table 1), which shows that in the academic year ended in 1923 there were 2,172,200 pupils in attendance at educational institutions in Canada, or 25.1 p.c. of the 1921 population. Of the above, 1,927,807, or 21.2 p.c. of the total population, were enrolled in ordinary day schools under public control, the average daily attendance numbering 1,452,925. Those attending vocational schools—agricultural, commercial, industrial and other technical schools—numbered 80,773. There were 17,648 students in private business colleges, and 69,020 in other private schools under college grade. University students in regular courses numbered 25,298 and college students in regular courses, 6,943. Students in classical colleges numbered 9,942.

There were, in 1923, 60,906 teachers in schools under public control, 11,080 males and 49,826 females. The total expenditure on schools under public control was \$121,494,736, of which governments contributed \$15,186,006, and local taxation most of the balance.

The progress of public elementary and secondary education in Canada since the commencement of the present century, the growth of enrolment and the ratio of average attendance to enrolment, together with the increase of expenditure by governments and ratepayers is shown graphically by the accompanying chart.

ORDINARY DAY SCHOOLS IN CANADA.



NOTE.—The above ratio chart purposes to illustrate the convergence of enrolment and average attendance from year to year. The convergence should mean gradual elimination of waste. It also shows the divergence between expenditure by governments and ratepayers; this divergence probably represents increase of public interest in education.

1.—Statistical Summary of Education in Canada,

NUMBER OF PUPILS ATTENDING

No.	Type of Institution.	P.E.I. 1923.	N.S. 1923.	N.B. 1923.
1	Ordinary day schools under public control.....	17,742	114,458	78,753
2	Agricultural, commercial, industrial and other technical schools, including all evening schools, but not short courses in universities and colleges.....	177	3,807	1,237
3	Schools for teacher-training.....	347	372	459
4	Indian schools.....	37	293	270
5	Schools for the blind and deaf ¹	9	172	70
6	Business colleges (private).....	—	456	593
7	Private elementary and secondary schools.....	660	1,156	418
8	Preparatory courses at universities and colleges.....	40	332	286
9	Short, special and correspondence courses at universities and colleges.....	50	671	—
10	Classical colleges.....	—	—	—
11	Affiliated, professional and technical colleges (regular courses).....	—	310	—
12	Universities (regular courses).....	181	1,455	736
Grand Total (exclusive of duplicates).....		19,243	123,482	82,812
Population of 1921.....		88,615	523,837	387,876

DISTRIBUTION AND ATTENDANCE OF PUPILS IN ORDINARY

13	Number of boys enrolled.....	9,010	57,094	37,230
14	Number of girls enrolled.....	8,732	57,364	38,284
15	Total in the first six grades.....	13,449	88,459	37,749
16	Total in intermediate and secondary grades.....	4,620	25,919	9,210
17	Total in secondary grade.....	1,737	12,088	3,269
18	Boys in secondary grade.....	679	4,715	1,315
19	Girls in secondary grade.....	1,058	7,373	1,954
20	Number of pupils in graded schools.....	6,610	73,566	39,047
21	Number of pupils in ungraded schools.....	11,132	40,892	36,467
22	Average daily attendance.....	11,763	83,472	53,611
23	Average number of days each pupil attended during year.....	143.4	150.8	149.2
24	Average number of days schools were open during year.....	192	196	190
25	Percentage of total attendance in average attendance.....	66.3	72.8	68.1

TEACHERS, ACCOMMODATION AND EXPENDITURE

26	Teachers in schools under public control.....	613	3,237	2,298
27	Male teachers.....	131	277	194
28	Female teachers.....	482	2,960	2,104
29	Number of school districts.....	471	1,765	1,332
30	Number of school houses.....	471	1,914	—
31	Number of class-rooms in operation.....	611	3,036	2,108
32	Number of ungraded one-roomed schools.....	412	1,445	1,193
33	Average number of pupils to a class-room.....	29	38	37
34	Total expenditure on education..... \$	499,556	3,487,943	2,674,377
35	Total expenditure on education by governments..... \$	296,836	649,363	386,883
36	Total expenditure on education by ratepayers, etc..... \$	202,714	2,838,580	2,287,494
37	Expenditure on teachers' salaries..... \$	—	1,748,106	—
38	Average annual cost per pupil enrolled..... \$	28.17	30.42	33.96
39	Average annual cost per pupil in daily attendance..... \$	42.49	41.79	50.03

¹ The blind and deaf of Prince Edward Island and New Brunswick are accommodated at the institutions accommodated at the Institution for the Blind in Brantford, Ont., by arrangement between the and Alberta are accommodated at the School for the Deaf in Winnipeg, Man.

² Figures of 1921-22 in Quebec: calendar year 1922 for public and separate schools, and school year

³ Included with items 7 and 10. There were, however, a number in preparatory courses, in addition to

⁴ Including 469 in Yukon and N.W.T.

⁵ Not including "Business Colleges" and "Indian Schools" in Quebec, which are included under other

by Provinces, 1923, or latest year reported.

EDUCATIONAL INSTITUTIONS.

Quebec ² 1921-22.	Ontario ² 1922-23.	Manitoba 1923.	Sask. 1923.	Alberta 1923.	B.C. 1923.	Total.	No.
482,346	654,893	142,369	194,313	148,045	94,888	1,927,807	1
12,032	48,010	3,485	2,361	4,138	5,536	80,773	2
1,389	3,098	637	1,571	1,033	672	9,578	3
1,599	3,850	2,002	1,499	1,074	2,630	13,723 ⁴	4
622	465	114	68	54	70	1,635	5
3,043	8,149	1,840	676	2,082	809	17,648 ⁵	6
53,667	6,475	505	2,656	2,242	1,241	69,020	7
3	3,329	419	13	651	64	5,134	8
1,943	3,690	1,745	549	328	365	9,341	9
9,942	—	—	—	—	—	9,942	10
2,026	3,472	835	72	107	121	6,943	11
6,659	11,269	1,936	855	1,013	1,194	25,298	12
570,626	746,691	155,887	204,633	160,767	107,590	2,172,200 ⁶	
2,361,199	2,933,662	610,118	757,510	588,454	524,582	8,788,483	

DAY SCHOOLS UNDER PUBLIC CONTROL.

260,449	334,621	—	98,651	74,558	48,083	919,696	13
270,256	327,259	—	95,632	73,487	46,805	917,819	14
—	456,194	113,969	157,976	114,446	66,097	—	15
—	170,444	28,400	35,906	33,599	28,891	—	16
—	601,581	12,803	13,547	12,262	9,220	—	17
—	24,708	5,367	5,519	5,286	4,046	—	18
—	28,700	7,242	8,028	6,976	5,174	—	19
—	—	98,671	94,516	80,315	78,371	—	20
—	—	43,698	96,867	67,730	16,517	—	21
421,604	470,073	98,787	130,499	105,364	77,752	1,452,925	22
—	—	154.6	147.1	150.9	—	—	23
—	—	192	193	185	—	—	24
79.4	71.8	69.4	67.2	71.2	81.9	74.0	25

IN SCHOOLS UNDER PUBLIC CONTROL.

17,727	16,615	3,936	7,693	5,669	3,118	60,906	26
2,760	2,477	1,046	2,091	1,375	729	11,080	27
14,967	14,138	2,890	5,602	4,294	2,389	49,826	28
7,449	—	2,106	—	3,318	744	—	29
7,695	7,252	1,982	—	2,995	1,044	—	30
13,824	—	3,826	5,900	4,729	2,961	53,000	31
—	4,971	1,364	—	2,703	652	—	32
38	—	37	33	31	32	—	33
23,672,197	50,232,864	10,210,076	12,886,705	9,901,015	7,630,009	121,494,736	34
2,604,409	4,040,035	1,011,048	1,779,228	1,241,518	3,176,686	15,186,006	35
21,367,788	46,192,829	9,199,023	11,107,477	8,659,497	4,453,323	106,308,730	36
—	20,915,594	5,081,809	7,223,117	5,428,826	—	—	37
42.02	63.25	71.71	70.03	60.14	80.40	61.40	38
53.05	88.04	103.36	108.20	84.70	98.13	83.00	39

tions in Halifax, N.S., by arrangement with that province: the blind of the three Prairie Provinces different Prairie Provinces and Ontario: by a similar arrangement with Manitoba, the deaf of Saskatchewan

1922-23 for secondary schools, in Ontario. All other figures for Ontario are for 1922-23.

those included in items 7 and 10, in private schools not reporting.

items.

2.—Number of Teachers and Pupils in Canada, by Provinces, 1901, 1906, 1911, 1916 and 1921-1923 or latest year reported.¹

PRINCE EDWARD ISLAND (All publicly controlled schools, except Prince of Wales College, for year ended June 30).

Years.	Teachers.			Pupils Enrolled.			Average Attendance of Pupils.	
	Male.	Female.	Total.	Boys.	Girls.	Total.	No.	Per cent.
1901.....	299	290	589	11,319	9,460	20,779	12,330	59.34
1906.....	246	327	573	10,196	8,790	18,986	11,903	62.69
1911.....	178	413	591	9,152	8,245	17,397	10,511	60.40
1916.....	138	457	595	9,565	8,797	18,362	11,347	61.79
1921.....	103	488	591	8,913	8,597	17,510	11,446	65.30
1922.....	122	489	611	9,273	9,050	18,323	12,338	67.40
1923.....	131	482	613	9,010	8,732	17,742	11,763	66.30

NOVA SCOTIA (Elementary and secondary publicly controlled schools for the year ended July 31).

1901.....	540	1,952	2,492	49,768	48,642	98,410	53,643	54.5
1906.....	366	2,212	2,578	50,198	50,134	100,332	59,165	58.9
1911.....	331	2,468	2,799	50,985	51,925	102,910	61,250	59.5
1916.....	246	2,773	3,019	53,944	55,245	109,189	69,227	63.4
1921.....	203	2,886	3,089	54,355	55,128	109,483	73,291	66.9
1922.....	263	2,945	3,208	57,028	57,201	114,229	79,410	69.5
1923.....	277	2,960	3,237	57,094	57,364	114,458	83,472	72.8

NEW BRUNSWICK (Elementary and secondary publicly controlled schools for second term ended June 30).

1901.....	353	1,488	1,841	30,870	29,550	60,420	37,717	58.34
1906.....	302	1,577	1,879	30,913	29,768	60,681	37,540	61.86
1911.....	221	1,754	1,975	31,871	31,202	63,073	39,215	62.17
1916.....	196	1,965	2,161	33,089	33,459	66,548	43,914	65.98
1921.....	155	1,987	2,142	33,615	34,477	68,092	46,777	74.00
1922.....	180	2,066	2,246	35,431	35,915	71,346	51,590	72.30
1923.....	194	2,104	2,298	35,374	36,175	71,549	53,611	72.30

QUEBEC (Elementary and Model Schools and Academies for year ended June 30).

1901.....	1,268	8,924	10,192	153,801	161,080	314,881	232,255	73.76
1906.....	1,422	9,779	11,201	166,967	174,841	341,808	263,111	76.97
1911.....	1,786	11,104	12,890	189,116	200,007	389,123	301,678	77.52
1916.....	2,263	12,813	15,076	225,425	239,032	464,447	373,364	80.39
1921.....	2,631	14,570	17,201	248,544	264,107	512,651	397,172	77.47
1922.....	2,760	14,967	17,727	260,449	270,256	530,705	421,604	78.88

ONTARIO (Elementary and secondary publicly controlled schools for calendar years up to 1916, since which date the secondary school year has ended on June 30).

1901.....	2,666	7,134	9,800	247,351	233,778	492,534	275,234	55.81
1906.....	2,376	8,368	10,744	243,572	234,812	492,544	285,330	57.81
1911.....	2,145	9,871	12,016	253,220	244,708	518,605	305,648	58.94
1916.....	2,007	11,730	13,737	273,676	269,214	560,340	355,364	65.44
1921.....	2,326	13,666	15,992	318,350	313,773	632,123	446,396	70.62
1922.....	2,477	14,138	16,615	330,933 ²	323,960 ²	654,893 ²	470,073	71.80

The discrepancy between the total of pupils enrolled in Ontario from 1901 to 1916 and the number by sex for the same years is due to the inclusion of kindergarten pupils in the total. The number by sex of these kindergarten pupils is not available.

¹ Statistics for other years are given on pages 140-143 of the 1921 Year Book. * In addition to the above 3,688 boys and 3,299 girls, or a total of 6,987, were in attendance at full time day vocational schools in 1922-23.

2.—Number of Teachers and Pupils in Canada, by Provinces, 1901, 1906, 1911, 1916 and 1921-1923 or latest year reported¹—concluded.

MANITOBA (Elementary and secondary publicly controlled schools for year ended June 30).

Years.	Teachers.			Pupils Enrolled.			Average Attendance of Pupils.	
	Male.	Female.	Total.	Boys.	Girls.	Total.	No.	Per cent.
1901.....	618	1,051	1,669	—	—	51,888	27,550	52.9
1906.....	596	1,769	2,365	—	—	64,123	34,947	54.5
1911.....	651	2,217	2,868	—	—	80,848	45,303	56.3
1916.....	491	2,500	2,991	—	—	103,796	66,561	64.1
1921.....	796	2,912	3,708	—	—	129,015	86,137	66.76
1922.....	924	2,969	3,893	—	—	136,876	95,433	69.72
1923.....	1,046	2,890	3,936	—	—	142,369	98,787	69.39

SASKATCHEWAN (Elementary and secondary publicly controlled schools for year ended December 31).

1906.....	563	733	1,296	16,376	14,899	31,275	15,770	50.31
1911.....	1,316	2,175	3,547	37,692	34,568	72,260	38,278	53.00
1916.....	1,490	4,187	5,787	66,497	62,942	129,439	71,522	55.30
1921.....	1,830	5,330	7,160	93,943	90,928	184,871	117,390	63.50
1922 ⁴	1,971	5,254	7,225	93,644	90,291	183,935 ²	119,041	64.72
1923 ⁴	2,091	5,602	7,693	98,651	95,632	194,283	130,499	67.20

ALBERTA (Elementary and secondary publicly controlled schools for year ended December 31).

1906.....	280	644	924	14,701	14,083	28,784	14,782	51.00
1911.....	867	1,784	2,651	31,753	29,907	61,660	32,556	52.08
1916.....	1,355	3,252	4,607	50,375	48,826	99,201	60,271	60.75
1921 ³	—	—	5,320	62,957	61,371	124,328	89,401	73.5
1922 ⁴	1,428	4,359	5,787	72,093	70,809	142,902	100,515	70.3
1923 ⁴	1,375	4,294	5,669	74,558	73,487	148,045	105,364	71.2

BRITISH COLUMBIA (Elementary and secondary publicly controlled schools for year ended June 30).

1901.....	185	343	543	12,069	11,546	23,615	15,335	64.94
1906.....	176	477	690	14,524	13,998	28,522	19,809	68.39
1911.....	323	856	1,179	23,162	21,783	44,945	32,517	71.27
1916.....	523	1,641	2,064	32,874	31,696	64,570	50,880	78.78
1921.....	595	2,139	2,734	43,442	42,508	85,950	68,497	79.69
1922.....	700	2,294	2,994	46,833	45,086	91,919	75,528	82.16
1923.....	729	2,389	3,118	48,083	46,805	94,888	77,752	81.94

NOTE.—The totals for teachers in British Columbia in 1901 and 1906 are greater than the sum of the male and the female teachers because no information as to the sex of high school teachers is available. This discrepancy also appears in the Summary for Canada.

SUMMARY FOR CANADA.

1901.....	5,929	21,182	27,126	505,178	494,056	1,062,527	654,064	61.56
1906.....	6,327	25,886	32,263	547,447	541,325	1,167,055	742,357	63.61
1911.....	7,818	33,642	40,502	626,951	622,345	1,350,821	866,956	64.18
1916.....	8,709	41,213	50,307	745,445	749,211	1,615,892	1,102,450	68.23
1921.....	8,639	52,617	57,937	864,119	870,889	1,864,023	1,336,507	71.70
1922.....	11,080	49,826	60,906	914,162	912,411	1,968,932	1,452,925	73.05

NOTE.—For 1901, the summary for Canada includes the seven provinces of Prince Edward Island, Nova Scotia, New Brunswick, Quebec, Ontario, Manitoba and British Columbia. The provinces of Saskatchewan and Alberta were formed in 1905, and from 1906 onward all the nine provinces are included. In Saskatchewan, the sex of the teachers in secondary schools is not given; in Manitoba, the sex of the pupils is not given for any of the years, while the sex of the kindergarten pupils in Ontario was not given until 1917. Consequently, certain partial totals are printed in italics. A general summary of elementary and secondary schools under public control for 1923, or latest year reported for all, is given in Table 1 of this section.

¹ Statistics for other years are given on pages 140-143 of the 1921 Year Book. ² There were in addition 5,015 not classified by sex. ³ Half year only. ⁴ Year ended June 30.

3.—Teachers in Training in Nova Scotia, New Brunswick, Quebec, Ontario and Manitoba, 1901, 1906, 1911, 1916-1923, Saskatchewan and Alberta, 1906, 1911, 1916-1923.

NOVA SCOTIA.

Number of Teachers in Training in the Provincial Normal College.

Years.	Enrolment.	Years.	Enrolment.	Years.	Enrolment.	Years.	Enrolment.
1901.....	240	1916.....	388	1919.....	255	1922.....	352
1906.....	154	1917.....	263	1920.....	228	1923.....	353
1911.....	268	1918.....	260	1921.....	241		

NEW BRUNSWICK.

Number of Instructors and Teachers in Training in the Normal School.

Years.	Instructors.	Teachers in Training in Normal School.			Years.	Instructors.	Teachers in Training in Normal School.		
		Male.	Female.	Total.			Male.	Female.	Total.
1901.....	11	41	155	196	1919.....	19	13	250	275
1906.....	16	44	263	307	1920.....	-	25	242	267
1911.....	16	46	324	370	1921.....	-	15	201	216
1916.....	19	45	327	372	1922.....	-	46	313	359
1917.....	18	41	331	372	1923.....	11	-	-	451
1918.....	20	29	258	287					

QUEBEC.

Number of Teachers and Pupils in Normal Schools.

Years.	Schools.	Instructors.			Teachers in Training.			Average attendance.	Per cent.
		Male.	Female.	Total.	Male.	Female.	Total.		
1901.....	5	31	27	58	97	256	353	345	97.73
1906.....	5	35	27	62	143	280	423	420	99.29
1911.....	11	50	79	129	174	666	840	835	99.40
1916.....	14	52	144	196	191	1,166	1,357	1,357	100.00
1917.....	14	52	144	196	180	1,181	1,361	1,361	100.00
1918.....	14	52	153	205	180	1,159	1,339	1,339	100.00
1919.....	14	57	148	205	159	1,064	1,223	1,135	92.80
1920.....	14	50	157	207	182	1,320	1,502	1,395	92.87
1921.....	-	-	-	-	166	1,210	1,376	-	-
1922.....	-	-	-	-	172	1,217	1,389	-	-
1923.....	-	27	140	167	199	1,356	1,555	-	-

NOTE.—In Prince Edward Island, teachers are trained in Prince of Wales College; the number of the students in this college in 1922-23 was 129 men and 218 women, or a total of 347. All the first year students, comprising considerably more than one-half the total enrolment, were required to take professional (teacher-training) work in addition to academic work. In British Columbia, teachers are trained at the Normal Schools in Vancouver and Victoria. In 1922-23 there were enrolled in these schools 672 students.

3.—Teachers in Training in Nova Scotia, New Brunswick, Quebec, Ontario and Manitoba, 1901, 1906, 1911, 1916-1923, Saskatchewan and Alberta, 1906, 1911, 1916-1922

—con.

ONTARIO.

Teachers trained in 1902, 1906, 1911, 1916 to 1923 inclusive.

Years. ¹	Model Schools.			Provincial Normal Schools.			Normal Colleges, etc.			Total.		Grand Total.
	Male.	Fe-male.	Total ²	Male.	Fe-male.	Total.	Male.	Fe-male.	Total.	Male.	Fe-male.	
1902.....	—	—	—	—	—	—	—	—	—	—	—	1,922
1906.....	389	1,361	1,750	21	324	345	52	139	191	462	1,824	2,286
1910-11.....	31	177	208	121	1,145	1,266	—	—	—	152	1,322	1,474
1915-16.....	43	167	210 ²	211	1,398	1,609	—	—	—	254	1,565	1,819
1916-17.....	14	131	145	137	1,156	1,293	—	—	—	151	1,287	1,438
1917-18.....	5	157	162	59	1,455	1,514	—	—	—	64	1,612	1,676
1918-19.....	—	86	86	44	1,056	1,100	169	304	473	213	1,446	1,659
1919-20.....	4	77	81	203	1,045	1,248	297	262	559	504	1,384	1,888
1920-21.....	41	460	514 ⁴	199	1,282	1,481	150	76	226	390	1,818	2,221
1921-22.....	57	525	616 ⁴	273	1,542	1,815	213	140	353	543	2,207	2,784
1922-23.....	64	605	699 ⁴	348	2,081	2,429	—	—	422	412	2,686	3,550

¹ Previous to 1908, there were 55 County Model Schools in Ontario, in addition to three Normal Schools and the Normal College. The function of these Model Schools was the training of third class teachers, while that of the Normal Schools was generally the training of second class and kindergarten teachers, and that of the College, the training of first class and secondary teachers. In 1908, most of the County Model Schools were abolished and the duty of training teachers for all the Public and Separate Schools except those in the districts and poorer sections of the province was placed upon the Normal Schools, which were increased in number from 3 to 7.

The Department of Education ceased to report the attendance at the Normal College after 1906. This college has since been known by various names. Up till 1920, its work was done by the Faculty of Education of the Universities of Toronto and Queen's, and the figures for the Normal College given in the above table for 1918-19 and 1919-20 represent the enrolment in the Faculties of Education of these Universities. In 1920 their functions were transferred to the Ontario College of Education.

² Autumn Model Schools.

³ Including extra-mural students.

⁴ Includes in 1920-21, 13, in 1921-22, 34, and in 1922-23, 30 students not classified by sex.

MANITOBA.

Number of Teachers and Students in Normal Schools.

Years.	Instructors.		Students at		Years.	Instructors.		Students at		
	Provincial Normal.	Local Normal.	2nd class sessions.	3rd class sessions.		Provincial Normal.	Local Normal.	1st class sessions.	2nd class sessions.	3rd class sessions.
1901....	7	13	90	161	1918...	10	7	—	288	225
1906....	6	14	148	328	1919...	10	5	—	251	303
1911....	6	11	126	502	1920...	10	4	—	285	308
1916....	14	12	331	406	1921...	10	4	—	321	321
1917....	13	11	309	290	1922...	11	5	69	363	220
					1923...	13	5	101	364	172

3.—Teachers in Training in Nova Scotia, New Brunswick, Quebec, Ontario and Manitoba, 1901, 1906, 1911, 1916-1923, Saskatchewan and Alberta, 1906, 1911, 1916-1922
—concluded.

SASKATCHEWAN.

Teachers trained 1906, 1911, 1916 to 1922 inclusive.

Years.	First Class.		Second Class.		Third Class.		Total.		Grand Total.
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
1906.....	17	15	46	98	2	10	65	123	183
1911.....	—	—	28	104	18	91	46	195	241
1916.....	40	76	48	242	149	356	237	674	911
1917.....	26	66	38	287	89	575	153	928	1,081
1918.....	15	91	35	382	14	83	64	556	620
1919.....	36	95	57	420	71	379	164	894	1,058
1920.....	15	37	31	164	91	385	137	586	723
1921.....	21	64	25	155	169	465	215	684	899
1922.....	—	—	—	—	—	—	419	1,152	1,571

ALBERTA.

Teachers trained at Edmonton, Calgary and Camrose Normal Schools 1906, 1911, 1916 to 1922 inclusive.

Years.	First Class.			Second Class.			Total.		Grand Total.	Special Classes ¹	Academic Class.
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.			
1906.....	—	—	25	—	—	77	27	75	102	—	—
1911.....	34	47	81	42	125	167	76	172	248	—	—
1916.....	58	88	146	66	203	269	124	291	415	23	—
1917.....	31	54	85	32	217	249	63	271	334	24	—
1918.....	30	121	151	30	286	316	60	407	467	21	—
1919.....	44	132	176	74	343	422	118	480	598	345	—
1920.....	39	176	215	75	405	479	114	580	694	—	—
1921.....	62	198	260	111	472	583	204	706	910	49	18
1922.....	97	172	269	189	474	663	286	646	932	—	35

¹ These classes are designed principally for the purpose of giving teachers from the United Kingdom and United States a short period of training in the special requirements of the Alberta Department of Education. In 1918 a class was added for the purpose of enabling second class teachers to train for a higher professional certificate. The large enrolment in 1919 contained a number of students who desired special qualifications for teaching foreigners.

4.—Number of Teachers and Pupils in Roman Catholic Classical Colleges in Quebec, 1901, 1906, 1911, 1916, 1921 and 1922.

Years.	Number of			Average attendance.	Years.	Number of			Average attendance.
	Colleges.	Professors.	Pupils enrolled.			Colleges.	Professors.	Students enrolled.	
1901.....	19	549	5,915	5,468	1916.....	21	704	7,696	6,602
1906.....	19	621	6,318	5,895	1921.....	21	797	9,033	8,159
1911.....	19	642	7,140	6,521	1922.....	21	830	9,321	8,592

NOTE.—The Roman Catholic Classical Colleges are not included in Table 2 with the other public institutions for the reason that they are special institutions doing university, secondary and even elementary work. The following statistics of secondary schools in Ontario, Saskatchewan and British Columbia have been included in Table 2, and are repeated here mainly to show the differentiation between the sexes in the higher grades.

5.—Number of Teachers and Pupils in Collegiate Institutes and High Schools in Ontario, 1901, 1906, 1911, 1917, 1922 and 1923.

Years.	Schools.	Teachers.	Pupils Enrolled.			Average attendance.	Per cent.
			Boys.	Girls.	Total.		
1901.....	131	579	10,869	11,654	22,523	13,224	58.71
1906.....	142	719	13,336	16,056	29,392	18,078	61.50
1911.....	148	898	14,679	17,548	32,227	20,177	62.60
1916-17.....	161	1,038	12,339	16,494	28,833	22,781	79.06
1921-22.....	170	1,420	18,338	21,077	39,405	34,262	86.91
1922-23.....	175	1,420	21,139	23,492	44,631	37,821	88.07

6.—Number of Teachers and Pupils in Continuation Schools in Ontario, 1911, 1917, 1922 and 1923.

Years.	Schools.	Teachers.	Pupils Enrolled.			Average attendance.	Per cent.
			Boys.	Girls.	Total.		
1911.....	129	218	2,394	3,359	5,753	3,487	60.61
1916-17.....	132	234	1,979	3,103	5,082	3,729	73.37
1921-22.....	160	323	3,080	4,425	7,505	6,309	84.06
1922-23.....	181	323	3,569	5,208	8,777	7,234	87.04

NOTE.—Previous to 1911 the statistics of these schools were included with those of Elementary Schools.

7.—Number of Teachers and Pupils in Collegiate Institutes and High Schools in Saskatchewan, 1908, 1911, 1916, 1921-1923.

Years.	Schools.	Teachers.	Pupils.					Total.
			Boys.	Girls.	1st and 2nd years.	3rd year.	4th year.	
1908.....	8	23	335	399	487	183	64	734
1911.....	13	56	766	927	1,003	486	204	1,693
1916.....	21	138	1,566	2,283	2,398	1,090	361	3,849
1921.....	24	200	2,944	3,959	4,615	1,617	671	6,903
1922.....	21	202	2,423	3,204	3,925	1,250	452	5,627
1923.....	22	196	2,673	3,672	3,747	1,377	612	6,345

8.—Number of Teachers and Pupils in High Schools in British Columbia, 1901, 1906, 1911, 1916, 1921-1923.

Years.	Schools.	Teachers.	Pupils Enrolled.			Average attendance.	Per cent.
			Boys.	Girls.	Total.		
1901.....	5	15	215	369	584	373	63.87
1906.....	13	37	473	763	1,236	923	74.68
1911.....	23	71	940	1,048	1,988	1,533	77.11
1916.....	40	162	2,260	2,510	4,770	3,816	80.00
1921.....	52	251	3,063	4,166	7,259	6,132	84.48
1922.....	58	301	3,788	4,846	8,634	7,481	86.64
1923.....	59	332	4,046	5,174	9,220	7,957	88.67

9.—Receipts and Expenditure for Public Education in Canada, by Provinces, 1901, 1906, 1911, 1916, 1921-1923².

PRINCE EDWARD ISLAND.

(RECEIPTS).

Years.	Government Grant.	Local Assessment.	Total.	Years.	Government Grant.	Local Assessment.	Total.
	\$	\$	\$		\$	\$	\$
1901.....	128,288	36,647	164,935	1916.....	173,962	70,610	244,572
1906.....	91,946	34,763	126,709	1921.....	244,347	152,431	396,778
1911.....	126,438	54,738	181,176	1922.....	271,103	157,766	428,869
				1923.....	296,836	202,714	499,550

¹ Nine months.

² For other years, see 1921 Year Book, pp. 148-153.

9.—Receipts and Expenditure for Public Education in Canada, by Provinces, 1901, 1906, 1911, 1916, 1921-1923¹—con.

NOVA SCOTIA.

(RECEIPTS).

Years.	Government Grant.	Municipal Funds.	Local Assessment.	Total.
	\$	\$	\$	\$
1901.....	254,778	119,876	470,108	844,762
1906.....	270,925	147,089	655,705	1,073,720
1911.....	378,726	146,823	804,125	1,329,674
1916.....	414,738	168,114	1,037,302	1,620,154
1921.....	576,591	495,242	2,370,712	3,442,546
1922.....	616,389	502,804	2,527,377	3,646,570
1923.....	649,363	525,114	2,313,466	3,487,943

NEW BRUNSWICK (RECEIPTS).

	\$	\$	\$	\$
1901.....	163,225	90,492	346,623	600,340
1906.....	160,957	91,718	—	—
1911.....	196,082	90,193	593,073	879,348
1916.....	206,486	96,141	844,256	1,146,883
1921.....	352,693	146,003	1,779,926	2,278,622
1922.....	381,075	195,948	2,080,023	2,657,046
1923.....	386,883	204,103	2,083,391	2,674,377

QUEBEC (EXPENDITURE).

Years.	Government Grant.	Local Assessment and other sources.	Total.	Years.	Government Grant.	Local Assessment and other sources.	Total.
	\$	\$	\$		\$	\$	\$
1901.....	453,950	2,999,804	3,453,754	1916.....	1,882,838	10,533,769	12,416,607
1906.....	536,150	3,802,402	4,338,552	1921.....	2,351,471	19,771,508	22,122,979
1911.....	1,065,429	5,729,104	6,794,533	1922.....	2,604,409	21,367,788	23,972,197

ONTARIO (RECEIPTS).

Years.	Elementary Schools.				Total for Secondary Schools.	Grand Total.
	Government Grant.	Local Assessment.	Clergy Reserve Fund and other sources.	Total.		
	\$	\$	\$	\$	\$	\$
1901.....	377,308	3,784,070	1,468,678	5,630,056	784,626	6,414,682
1906.....	509,795	5,529,496	1,883,394	7,922,685	1,209,782	9,132,467
1911.....	892,377	7,826,083	3,778,183	12,496,643	2,180,026	14,676,669
1916.....	831,988	11,010,356	4,327,738	16,080,082	3,380,927	19,461,009
1921.....	2,454,018	21,195,263	11,461,271	35,110,552	8,745,050	43,855,602
1922.....	2,976,712	22,842,180	12,805,773	38,624,665	11,608,199	50,232,864

¹For other years, see 1921 Year Book, pp. 148-153.

9.—Receipts and Expenditure for Public Education in Canada, by Provinces, 1901, 1906, 1911, 1916, 1921-1923—con.

ONTARIO (EXPENDITURE).

Years.	Elementary Schools.					Total for Secondary and Technical schools.	Grand Total.
	Teachers' Salaries.	Sites and building school-houses.	Maps, apparatus, prizes, etc.	Rent, repairs,* fuel, and other expenses.	Total for Elementary schools.		
	\$	\$	\$	\$	\$	\$	\$
1901.....	3,055,321	531,072	81,685	1,052,232	4,720,310	728,132	5,448,442
1906.....	3,880,548	854,452	108,547	1,559,659	6,403,206	1,029,294	7,432,500
1911.....	5,610,213	2,164,459	139,229	1,990,383	9,904,284	2,200,138	12,104,422
1916.....	7,929,490	2,232,110	192,212	2,998,093	13,351,905	2,794,402	16,146,307
1921.....	15,473,049	5,605,341	418,370	8,218,033	29,714,793	7,024,771	36,739,564
1922.....	16,690,982	6,284,139	480,483	8,465,280	31,920,884	9,495,920	41,416,804

MANITOBA.

Years.	RECEIPTS.						Total.
	Legislative grant.	Municipal taxes.	Debentures.	Promissory notes.	Sundries.	Balance from previous years.	
	\$	\$	\$	\$	\$	\$	\$
1907.....	242,383	1,223,336	315,271	802,574	141,452	115,677	2,840,693
1911.....	325,410	1,847,380	1,318,068	1,275,239	76,172	399,539	5,241,808
1916.....	503,774	3,296,667	344,673	2,080,204	239,176	609,982	7,074,476
1921.....	822,186	6,922,864	2,250,073	2,773,212	280,644	457,312	13,506,292
1922.....	1,058,292	7,991,517	1,832,134	2,613,709	242,840	563,183	14,301,675
1923.....	1,011,048	8,173,986	314,519	3,135,722	308,438	894,229	13,837,943

Years.	EXPENDITURE.					Total.
	Teachers' Salaries.	Building, etc.	Fuel.	Repairs and caretaking.	Salary of Sec.-Treas.	
	\$	\$	\$	\$	\$	\$
1907.....	1,009,224	460,260	79,963	126,216		23,420
1911.....	1,452,630	1,199,288	109,299	167,734		29,218
1916.....	2,195,226	823,266	165,697	358,315		41,530
1921.....	4,335,529	2,081,176	393,160	741,058		91,412
1922.....	5,016,903	1,947,527	512,016	746,642		140,414
1923.....	5,081,809	1,776,588	433,882	659,134		146,797

Years.	Principal of Debentures.	Interest on Debentures.	Promissory notes.	Other expenditure.	Total.
	\$	\$	\$	\$	
1907.....	81,795	80,392	667,791	200,856	2,729,917
1911.....	131,975	144,735	1,590,565	199,446	5,024,890
1916.....	194,257	409,193	2,132,286	338,459	6,658,229
1921.....	420,323	496,565	3,049,437	1,470,545	13,079,205
1922.....	483,365	610,418	2,666,484	1,439,055	13,564,824
1923.....	596,878	625,196	2,789,178	1,390,092	12,999,254

* For other years, see 1921 Year Book, pp. 148-153.

NOTE.—For a summary of the principal items of Receipts and Expenditure from 1901 to 1906, see Year Book of 1915, page 128. From 1907 the items are given in greater detail, as above. Owing to change of year, no figures were published for 1912.

9.—Receipts and Expenditure for Public Education in Canada, by Provinces, 1901, 1906, 1911, 1916, 1921-1923¹—con.

SASKATCHEWAN (RECEIPTS).

Years.	Elementary Schools.					Secondary Schools.		Grand Total.
	Government Grant.	Local Assessment.	Proceeds of Debentures.	Other sources.	Total. ²	Government Grant.	Total. ²	
	\$	\$	\$	\$	\$	\$	\$	\$
1906.....	174,218	602,624	360,206	328,313	1,465,361	—	—	1,465,361
1911.....	555,438	1,519,528	659,270	1,295,556	4,029,792	—	—	4,029,792
1916.....	969,709	4,694,242	649,300	2,999,443	9,312,694	77,158	593,144	9,905,838
1921.....	1,346,459	9,619,615	1,475,882	2,546,736	14,988,692	145,151	4,020,432	19,009,124
1922.....	1,779,228	10,090,401	631,219	2,026,888	14,527,736	191,912	601,130	15,128,866

SASKATCHEWAN (EXPENDITURE).

Years	Elementary Schools.						Secondary Schools.		Grand Total.
	Teachers' Salaries.	Officials' Salaries	Paid on Debentures.	Paid on Notes (renewals and interest).	School buildings and repairs.	Care-taking and fuel.	Total Expenditure. ²	Teachers' Salaries	Total. ²
	\$	\$	\$	\$	\$	\$	\$	\$	\$
1906..	471,736	29,076	113,958	303,739	339,933	47,251	1,448,915	—	1,448,915
1911..	1,298,925	84,603	369,951	1,071,783	619,601	172,993	3,990,036	—	3,990,036
1916..	2,956,666	—	—	—	1,105,765	—	9,211,390	175,098	9,792,018
1921..	6,890,376	—	864,304	2,169,914	1,702,327	—	15,074,266	382,824	15,612,331
1922..	6,812,680	—	1,379,574	2,026,119	424,531	—	14,211,999	410,437	14,906,824

ALBERTA (RECEIPTS).

Years.	Government Grant.	Local Assessment.	Proceeds of Debentures.	Borrowed by Note.	Other sources.	Total.
	\$	\$	\$	\$	\$	\$
1906.....	142,836	416,344	297,158	292,786	140,797	1,289,921
1911.....	432,877	1,575,412	1,481,173	1,461,208	120,363	5,071,033
1916.....	553,141	3,749,007	155,883	1,105,538	1,203,814	6,767,383
1921.....	1,146,722	7,432,936	814,008	2,321,144	323,242	12,038,052
1922.....	1,241,578	7,475,582	1,262,120	2,232,254	1,154,221	13,414,351

ALBERTA (EXPENDITURE).

Years.	Teachers' Salaries.	Officials' Salaries.	Paid on Debentures.	Paid on Notes (renewals and interest).	School buildings and repairs.	Other Expenditure.	Total Expenditure.
	\$	\$	\$	\$	\$	\$	\$
1906.....	386,108	23,796	94,947	298,984	274,525	180,747	1,259,107
1911.....	1,144,584	87,409	408,442	1,309,134	1,223,142	853,062	5,025,773
1916.....	2,421,404	230,931	956,563	1,266,884	325,297	920,535	6,121,614
1921.....	5,213,011	298,003	1,141,660	2,218,782	1,120,851	2,142,181	12,134,488
1922.....	5,428,826	283,873	1,183,983	2,457,356	999,787	2,004,543	12,358,371

¹ For other years, see 1921 Year Book, pp. 148-153. ² The secondary school receipts and expenditure were included in those of the elementary schools until 1912.

9.—Receipts and Expenditure for Public Education in Canada, by Provinces, 1901, 1906, 1911, 1916, 1921-1923¹—concluded.

BRITISH COLUMBIA (EXPENDITURE).

Years.	Provincial Government.	Cities, Municipalities, Rural and Assisted Schools.	Total.	Years.	Provincial Government.	Cities, Municipalities, Rural and Assisted Schools.	Total.
	\$	\$	\$		\$	\$	\$
1901.....	350,532	182,160	532,692	1921.....	2,931,572	4,238,458	7,170,030
1906.....	444,543	244,198	688,741	1922.....	3,141,738	4,691,840	7,833,578
1911.....	1,001,808	1,639,714	2,641,522	1923.....	3,176,686	4,453,323	7,630,009
1916.....	1,591,322	1,625,028	3,216,350				

For other years, see 1921 Year Book, pp. 148-153.

10.—Average Annual Salaries of School Teachers, by Provinces, 1922-23 or latest year reported.

Province and Class of Certificate.	Male.	Female.	Province and Class of Certificate.	Male.	Female.
Prince Edward Island, 1923—	\$	\$	Saskatchewan, 1923 ² —	\$	\$
First class.....	808	643	Rural schools—		
Second class.....	555	502	First class.....	1,291	1,168
Third class.....	465	416	Second class.....	1,226	1,145
Nova Scotia, 1922—			Third class.....	1,138	1,070
Class A.....	1,471	830	Provisional.....	1,153	1,051
Class B.....	987	672	Cities, towns and villages—		
Class C.....	697	593	First class.....	1,868	1,351
Class D.....	643	493	Second class.....	1,522	1,223
Academic.....	1,641	1,255	Third class.....	1,221	1,096
New Brunswick, 1922—			Provisional.....	1,450	1,234
First class.....	1,450	996	Alberta, 1923—		
Second class.....	809	735	First class.....	1,652	1,250
Third class.....	532	562	Second class.....	1,213	1,126
Superior schools.....	1,333	-	Third class.....	1,082	1,038
Grammar schools.....	-	-	Permit.....	997	1,042
Quebec, 1922 ¹ —			Specialist.....	2,304	2,008
Protestant schools.....	2,459	1,043	Pending ³	1,033	1,027
Roman Catholic schools.....	1,313	323	British Columbia, 1923—		
Ontario, 1922—			Academic.....	2,372	1,546
Public and Separate schools—			First.....	1,965	1,297
First class.....	2,290	1,226	Second.....	1,381	1,188
Second class.....	1,434	1,137	Third.....	1,193	1,132
Third class and district certificate.....	911	855	Temporary.....	1,192	1,267
High Schools and Collegiate Institutes, 1923—			Special.....	2,052	1,693
Principals.....	2,836		Average.....	1,945	1,255
Assistants.....	2,527	1,961			
Continuation Schools, 1923—					
Principals.....	1,754				
Assistants.....	1,433	1,408			

¹ In the figures for Quebec lay teachers only are included. ² In Saskatchewan only elementary school teachers are included. ³ Pending means teachers with certificates from other provinces.

II.—VOCATIONAL AND TECHNICAL EDUCATION.

As late as the seventies and eighties of the last century, little vocational education was given in the schools; private business colleges were established in the cities about this time.

Among the first vocational courses to be introduced into schools were commercial courses, which were introduced into the high school curricula of Ontario and Manitoba in 1899, in British Columbia in 1905, and in Saskatchewan and Alberta about the same time. The classical colleges of Quebec were also among the first to provide a commercial course for those of their pupils who did not desire to enter the professions, and a school for commercial studies was founded in 1907 at Montreal.

Agriculture was first taught in special colleges, the Ontario Agricultural College at Guelph, a government institution, being founded in 1874, the Nova Scotia Agricultural College in 1888, the Manitoba Agricultural College in 1903, Macdonald College, at Ste. Anne de Bellevue, Que., in 1907. The agricultural college at Ste. Anne de la Pocatière, Quebec, the first in Canada and the second on the continent, had been founded in 1859, while the Oka Agricultural Institute was established in 1890. The Ontario Veterinary College, founded in Toronto as a private venture in 1862, was one of the first on the continent, and for many years drew its students very largely from the United States. In 1908 it was taken over by the Ontario Government, and has recently been transferred to Guelph.

Training in handicrafts was introduced into the schools in the form of manual training for boys and domestic science for girls. The former was originally intended merely as a training in the use of tools, partly as a recreation and partly as a means whereby the boy could get some idea of his capacity as a mechanic. A form of this manual training was introduced into Ontario schools in 1883, and into the schools of Nova Scotia in 1891; in the latter province it was made compulsory for teachers in training in 1893. In the Prairie Provinces, manual training was introduced in the first decade of the present century.

The second decade of the century has, however, seen the most rapid development in technical and vocational education. Following upon the publication of Dr. Seath's report on *Education for Industrial Purposes* and the report of the Royal Commission of 1910 on *Industrial Training and Technical Education*, published in 1913, technical education has made rapid strides, partly due to the stimulus given to manufactures by the war. By 1915, manual training courses in Ontario had branched out into industrial, technical and art schools, and in that year a large technical school was opened in Toronto. The Kelvin and St. John's Technical Schools in Winnipeg date from 1911, and the great technical school in Montreal from the same year.

Aid Given by Dominion Government.—While educational administration is a matter for the provinces, the Dominion Government, realizing the national importance of vocational education, has supplemented the provincial funds available for these purposes. In 1913 the Agricultural Instruction Act was passed, distributing \$10,000,000 in ten years among the provinces, for the advancement of agricultural education. In 1919 a similar sum was voted for technical education, to be divided within ten years among the provinces, approximately in proportion to population, but so as not to exceed the sums expended by the provinces on technical education. These grants have been most effective in turning the attention of the provincial authorities toward vocational education, which is making great strides, especially in the eastern manufacturing provinces.

The number of students in institutions for technical education coming within the scope of the Technical Education Act of 1919 (9-10 Geo. V, c. 73), in the academic years ended June 30, was as follows: 1921, 56,744; 1922, 61,961; 1923, 70,300 (Table 11).

11.—Vocational Schools, Teachers and Pupils in Canada, year ended June 30, 1923.¹

Provinces.	Number of Schools.			Number of Teachers.				Pupils Enrolled.			
	Day.	Evening.	Total.	Day.	Evening.	Correspond'g Dept.	Total.	Day.	Evening.	Correspond'g Dept.	Total.
Prince Edward Isl'd.	1	1	2	8	5	—	13	70	107	—	177
Nova Scotia.....	1	27	28	11	177	33	221	31	3,646	434	4,111
New Brunswick.....	4	9	13	14	51	—	65	246	981	—	1,227
Quebec.....	6	16	22	81	176	—	257	650	6,000	—	6,650
Ontario.....	16	50	66	337	1,097	—	1,434	9,402	33,581	—	42,983
Manitoba.....	7	2	9	129	49	—	178	1,535	1,950	—	3,485
Saskatchewan.....	4	4	8	19	57	—	76	1,292	1,069	—	2,361
Alberta.....	5	18	23	68	98	4	170	1,328	2,050	392	3,770
British Columbia.....	10	29	39	85	173	2	260	1,688	3,696	152	5,536
Total.....	54	156	210	752	1,883	39	2,674	16,242	53,080	978	70,300

¹ The vocational schools of which the statistics are given in this table, include only such schools classes or courses as receive grants under the Dominion Technical Education Act. The enrolment of these together with the enrolment of other schools doing technical work, but not receiving grants under the Act is given in Table 1, item 2. Schools conducting both day and evening classes are included under both headings. Teachers engaged in both day and evening work are also shown twice. Enrolments are the maximum number reported during the year. In Ontario the commercial classes in each locality are shown separately.

III.—HIGHER EDUCATION.

Higher education in Canada is carried on in 23 universities and 79 colleges. Of the latter, 35 are in the province of Quebec, including 21 classical colleges, 8 independent, non-subsidized institutions for "secondary" education and 6 others where superior education is given. The classical colleges are officially classed as "secondary" institutions, but the meaning of "secondary", as referring to Catholic education in Quebec, includes the provision of a full course in Arts, the degrees being conferred by Laval University and the University of Montreal.

Of the universities, six are State-controlled (New Brunswick, Toronto, Manitoba, Saskatchewan, Alberta and British Columbia); four others are undenominational (Dalhousie, McGill, Queen's and Western); while the remainder are denominational, St. Dunstan's, St. Francis Xavier, St. Joseph's, Laval, Montreal and Ottawa representing the Roman Catholic Church, King's College, Bishop's College and Trinity College representing the Church of England, Acadia and McMaster representing the Baptist Church, and Mount Allison and Victoria representing the Methodist Church. Victoria and Trinity are in federation with Toronto and King's College with Dalhousie.

The 79 colleges may be roughly classified as: 6 agricultural, 2 technical, 2 law, 1 dental, 1 veterinary, 1 school for pharmacy, 25 theological, 9 affiliated for arts and pure science, 21 classical and 11 miscellaneous, together with the college for the superior training of young ladies in Montreal. This classification is somewhat approximate, for the reason that a large number of theological and other colleges offer courses in arts or preparatory courses. Macdonald College, for example, might be classified as both agricultural and affiliated, or it might be excluded from the list of colleges and regarded as a faculty of McGill University. It is included above among the agricultural colleges, which include the Nova Scotia Agricultural College, Macdonald, Oka, and Ste. Anne de la Pocatière in Quebec, Ontario Agricultural College and Manitoba Agricultural College. The technical colleges are the Nova Scotia Technical College and the Alberta Institute of Technology and

Art. The law schools are Ontario Law School (Osgoode Hall), in Toronto, and the Manitoba Law School. The dental, veterinary and pharmaceutical colleges are in Ontario. The theological colleges are: the Presbyterian College and the Holy Heart College, in Nova Scotia; the Presbyterian College, the Montreal Diocesan, the Wesleyan Theological College, the Congregational College and six Catholic Theological Colleges, in Quebec; Knox, Toronto Bible, Waterloo, Huron and Wycliffe in Ontario; Manitoba College and St. John's, in Manitoba; St. Chad's, the Presbyterian, Emmanuel and Collège Catholique de Gravelbourg, in Saskatchewan; Robertson and Alberta Colleges in Alberta; and the Anglican Theological College in British Columbia. The affiliated colleges for arts, etc., are: Prince of Wales, in Prince Edward Island; St. Anne's and St. Mary's, in Nova Scotia; St. Michael's and St. Jerome's, in Ontario; Brandon and Wesley, in Manitoba; Edmonton Jesuit, in Alberta; and Columbian Methodist College, in British Columbia. The miscellaneous colleges are Ecole des Hautes Etudes Commerciales in Quebec; the Ontario College of Art and the Royal Military College in Ontario, together with the 8 independent "secondary" institutions in Quebec. The Edmonton Jesuit College is a classical college and is "associated" with Laval University, but the 21 classical colleges above mentioned are all situated in Quebec and "affiliated" or "annexed" to the Catholic universities. An "affiliated" college in Quebec means a college of which the university has direct control of the courses and degrees; an "annexed" college is one of which the university merely approves the curriculum and by-laws, is represented at the examinations and sanctions the diplomas awarded; an "associated" college is an affiliated college situated outside the province. St. Dunstan's University, St. Mathieu's Classical College at Gravelbourg, Sask., and the Edmonton Jesuit College are thus "associated" with Laval University.

Registration of Students.—The number of students registered in universities during the academic year 1922-23 was 13,301 in State-controlled institutions; 7,830 in other undenominational institutions; 18,095 in denominational institutions, making a grand total of 39,226. This, however, is a gross registration, including duplicate registrations of federated universities, affiliated colleges and preparatory secondary schools. In colleges the total registration was 22,405, including 4,191 in agricultural colleges; 1,242 in technical colleges; 413 in law schools; 1,005 in schools of dentistry, pharmacy and veterinary medicine; 1,887 in theological colleges; 2,556 in colleges affiliated for arts, etc.; 9,221 in classical colleges and 1,882 in miscellaneous colleges.

The net result after the elimination of duplicate registrations was 51,528 in universities and colleges. These included 10,419 in preparatory courses, offered at 26 institutions; 11,630 undergraduates in arts and pure science; 1,511 in graduate classes; 2,210 in medicine; 2,442 in engineering and applied science; 1,434 in music; 1,514 in theology; 510 in social science; 853 in commerce; 953 in law; 517 in pharmacy; 1,175 in dentistry; 52 in architecture; 1,353 in agriculture; 1,057 in pedagogy; 1,085 in household science; 153 in nursing; 93 in forestry; 103 in veterinary medicine; 2,647 in short courses for teachers; 3,533 in short courses for others than teachers; 1,768 in correspondence courses and 1,750 in all other courses. The difference between the sum of these figures and the net total given above, is accounted for by duplication of courses. Attention may be directed to the prominent place now occupied by short courses and correspondence courses. In universities alone these register 6,318 students, as compared with 33,412 in regular courses and 8,565 in preparatory courses. Short and correspondence courses were offered in 1922-23 at 12 of the 23 universities.

Degrees Conferred.—The number of first degrees conferred by universities during the academic year 1922-23 was 3,840, and of graduate degrees 1,348. The latter degrees were conferred by 23 institutions, but 984, or about 73 p.c., were conferred by 2 institutions, the universities of Toronto and Montreal, while 1,136 or nearly 85 p.c. were conferred by 4 institutions, Toronto, Montreal, Laval and Ottawa. In these 4 institutions the graduate degrees were conferred in the following faculties or courses: arts, pure science and philosophy, 468; commerce, 20; education, 188; agriculture, 10; applied science and engineering, 31; forestry, 7; law, 56; medicine, 80; music, 23; pharmacy, 20; theology, 42; veterinary medicine, 9; together with some 80 others. It is clear that, with the exception of degrees in arts, pure science, letters, philosophy and education, these degrees are not graduate degrees in the ordinary sense of the term, that is, degrees conferred for advanced work in a course from which the student has already graduated and received a first degree, but rather first degrees in medicine, law, etc., conferred on students who have already received such degrees as B.A. or B.Sc.

Financial Statistics.—Financial statistics show the total assets of 22 of the 23 universities of Canada at June 30, 1923, as \$76,361,389. The aggregate income of 22 of the 23 universities (Laval University did not report) was \$11,155,202, of which \$1,693,800 came from investments, \$6,429,883 from government and municipal grants, and \$2,142,943 from fees. The current expenditure of these 22 universities aggregated \$8,472,328 and the capital expenditure \$2,611,723—a total of \$11,084,051. (Table 16).

The 31 colleges reporting had in the aggregate at June 30, 1923, property to the extent of \$22,486,768; the income for the year was \$2,287,076 and their expenditure \$2,305,073. (Table 19).

12.—Universities of Canada: Foundation, Affiliation, Faculties and Degrees.

Name and Address.	Date of		Affiliation to other Universities.	Faculties.	Degrees.
	Original Foundation.	Present Charter.			
St. Dunstan's University, Charlottetown, P.E.I.	1855	—	Laval.	Arts, Preparatory and Commercial, Theology.	B.L., B.A., B.Sc., Ph.M.
University of King's College, Windsor, N.S.	1789	1802	Oxford and Cambridge.	Arts, Law, Science, Divinity.	B.A., M.A., B.Sc., D.Sc., M.Sc., B.C.L., D.C.L., B.D., D.D.
Dalhousie University, Halifax, N.S.	1818	1863	Oxford and Cambridge.	Arts and Science, Law, Medicine and Dentistry.	B.A., M.A., B.Sc., L. Mus., M.Sc., B.Mus., Phm. B., LL.B., M.D., C.M., D.D.S., LL.D. (Hon.)
Acadia University, Wolfville, N.S.	1838	1840	Oxford, Dalhousie, McGill, Nova Scotia Technical.	Arts, Divinity, Law, Science, Applied Science, Literature.	B.A., B.Sc., B. Th., and M.A.
University of St. Francis Xavier, Antigonish, N.S.	1855	1909	—	Arts, Science, Engineering, Law.	B.A., M.A., B.Sc., LL.D.
University of New Brunswick, Fredericton, N.B.	1800	1860	Oxford, Cambridge, Dublin, McGill.	Arts, Applied Science, Partial Course in Law.	B.A., M.A., B.Sc. in Civil Engineering, Electrical Engineering or Forestry, D.Sc.
Mount Allison University, Sackville, N.B.	1858	1886-1913	Dalhousie, Oxford and Cambridge.	Arts, Theology, Engineering.	B.A., M.A., B.Sc., B.D.
University of St. Joseph's College, St. Joseph, N.B.	1864	1898	Oxford.	Arts, Science.	B.A., B.S., B.L., B.C.S., M.A.

12.—Universities of Canada: Foundation, Affiliation, Faculties and Degrees—con.

Name and Address.	Date of		Affiliation to other Universities.	Faculties.	Degrees.
	Original Foundation.	Present Charter.			
McGill University, Montreal, Que.	1821	1852	Acadia, Mount Allison, St. Francis Xavier and Alberta are affiliated to McGill in the Faculty of Applied Science.	Arts, Applied Science, Law, Medicine, Agriculture.	B.A., M.A., B.C.L., D.C.L., LL.D., B.Sc., D.Sc., D.D.S., M. Sc., Mus. Bac., Mus. Doc., B.S.A., B. Arch., M.D., C.M., D. Litt., Ph. D., LL.B., LL.M., B. Com., B.H.S.
University of Bishop's College, Lennoxville, Que.	1843	1853	Oxford and Cambridge.	Arts, Divinity, Medicine and Law.	B.A., M.A., B.D., D.D., D.C.L., Mus. Bac., Mus. Doc., L.S.T.
Laval University, Quebec, Que.	1852	1852	—	Theology, Law, Medicine, Arts.	M.A., B.A., B.S., B.L., Ph. D., Ph. L., Ph. B., M.D., M.B., LL.B., LL.L., LL.D., D.B., D.L., D.D., C.L.B., C.L.L., C.I.D.
University of Montreal, Montreal, Que.	1878	1920	—	Theology, Law, Medicine, Arts, Domestic Science, Drawing, Religious and Profane Music.	Bachelor, Licentiate, Doctor.
University of Toronto, Toronto, Ont.	1827	1906	Oxford, Cambridge and Dublin.	Arts, Medicine, Applied Science, Engineering, Agriculture, Forestry, Education, Household Science.	B.A., M.A., Ph.D., LL.B., LL.M., LL.D., Mus. Bac., Mus. Doc., M.B., M.D., B.A.Sc., M.A.Sc., C.E., E.E., M.E., B. Pæd., D. Pæd., B.S.A., B.Sc.A., B.Sc.F., F.E., D.D.S., Ph.D., B.V.Sc., D.V.Sc., B.D., D.D.
Victoria University, Toronto, Ont.	1836	1836	Toronto.	Arts and Theology.	L. Th., R.D., D.D.
University of Trinity College, Toronto, Ont.	1851	1852	Toronto.	Arts and Divinity.	B.A., M.A., M.D., LL.D., D.Sc., D.P.H., Mus. Bach.
Western University, London, Ont.	1878	1908	—	Arts, Medicine and Public Health, Music.	B.A., M.A., B.Sc., D.Sc., M.Sc., M.D., M.B., LL.D., B.D., D.D., B. Pæd., D. Pæd., B. Com.
Queen's University, Kingston, Ont.	1841	1841	—	Arts, Science, Engineering, Medicine, Theology.	LL.D., D.D., B.Ph., D.Ph., B.A., M.A.
University of Ottawa, Ottawa, Ont.	1849	1866	—	Theology, Philosophy, Law, Arts and Commercial.	B.A., M.A., B.Sc., B. Th., B.D.
McMaster University, Toronto, Ont.	1857	1887	Oxford, Cambridge, London.	Arts, Theology.	B.A., M.A., B.Sc., M.D., C.M., B.C.E., B.E.E., M.C.E., M.E.E., B.M.E., B. Arch., Ph.D., B.S.A., LL.B., LL.D.
University of Manitoba, Winnipeg, Man.	1877	1877	—	Arts, Science, Law, Medicine, Engineering, Architecture, Pharmacy, Agriculture.	B.A., B.Sc., B.S.A., B.E., LL.B., M.A., M. Sc.
University of Saskatchewan, Saskatoon, Sask.	1907	1907	Oxford.	Arts, Science, Law, Agriculture, Engineering, Pharmacy, Accounting, Education, Veterinary Medicine.	B.A., B.Sc., B.S.A., B.E., LL.B., M.A., M. Sc.

12.—Universities of Canada: Foundation, Affiliation, Faculties and Degrees —concluded.

Name and Address.	Date of		Affiliation to other Universities.	Faculties.	Degrees.
	Original Foundation.	Present Charter.			
University of Alberta, Edmonton, Alberta.	1906	1910	Oxford, McGill and Toronto.	Arts and Sciences, Applied Science, Agriculture, Medicine, Dentistry, Law, Schools of Pharmacy and Accountancy.	B.A., B.Sc., M.A., B.S.A., M.Sc., LL.B., Phm. B., B.D., LL.D.
University of British Columbia, Vancouver, B.C.	1907	1908	—	Arts, Applied Science and Agriculture.	B.A., B.Sc.

13.—Universities of Canada: Number of Teaching Staff in the Various Faculties, 1922-23.

Name and Address of University.	Sex.	Professors and Instructors.							
		Arts and Pure Science.	Engineering.	Law.	Medicine.	Pharmacy.	Theology.	All others.	Total. ¹
St. Dunstan's University, Charlottetown, P.E.I.	M.	16	—	—	—	—	—	3	16
University of King's College, Windsor, N.S.	F.	—	2	11	—	—	4	—	26
Dalhousie University, Halifax, N.S.	M.	12	—	—	—	—	—	—	1
Acadia University, Wolfville, N.S.	F.	1	2	16	42	6	—	18	111
University of St. Francis Xavier, Antigonish, N.S.	M.	27	—	—	2	—	—	—	3
University of New Brunswick, Fredericton, N.B.	F.	1	6	—	—	—	4	—	21
University of Mt. Allison, Sackville, N.B.	M.	21	—	—	—	—	—	—	2
University of St. Joseph's College, St. Joseph, N.B.	F.	2	—	—	—	—	—	9	27
McGill University, Montreal, Que.	M.	23	—	—	—	—	—	1	3
University of Bishop's College, Lennoxville, Que.	F.	2	9	—	—	—	—	10	19
Laval University, Quebec, Que.	M.	9	—	—	—	—	—	—	—
University of Montreal, Montreal, Que.	F.	17	12	—	—	—	7	—	20
University of Toronto, Toronto, Ont.	M.	36	—	—	—	—	—	—	36
University of Trinity College, Toronto, Ont.	F.	—	—	—	—	—	—	—	—
Western University, London, Ont.	M.	153	76	17	164	5	—	147	383
Queen's University, Kingston, Ont.	F.	11	5	—	1	—	—	27	34
University of Ottawa, Ottawa, Ont.	M.	14	—	—	—	—	—	—	10
McMaster University, Toronto, Ont.	F.	—	—	18	29	4	17	49	236
University of Manitoba, Winnipeg, Man.	M.	119	—	—	—	—	—	15	15
University of Saskatchewan, Saskatoon, Sask.	F.	—	23	17	79	14	15	110	637
University of Alberta, Edmonton, Alta.	M.	379	—	—	—	—	—	29	295
University of British Columbia, Vancouver, B.C.	F.	166	96	—	218	—	—	56	532
University of Toronto, Toronto, Ont.	M.	180	—	—	8	—	—	22	48
University of Ottawa, Ottawa, Ont.	F.	19	—	—	—	—	12	—	34
University of Toronto, Toronto, Ont.	M.	22	—	—	—	—	—	—	2
University of Trinity College, Toronto, Ont.	F.	2	—	—	—	—	11	—	27
Western University, London, Ont.	M.	27	—	—	—	—	—	—	3
Queen's University, Kingston, Ont.	F.	3	—	—	55	—	—	40	105
University of Ottawa, Ottawa, Ont.	M.	20	—	—	1	—	—	3	13
McMaster University, Toronto, Ont.	F.	12	—	—	47	—	5	74	157
University of Manitoba, Winnipeg, Man.	M.	47	48	—	—	—	—	3	4
University of Saskatchewan, Saskatoon, Sask.	F.	4	—	—	—	—	8	6	109
University of Alberta, Edmonton, Alta.	M.	101	—	—	—	—	6	—	91
University of British Columbia, Vancouver, B.C.	F.	91	—	—	—	—	—	—	20
University of Toronto, Toronto, Ont.	M.	14	—	—	—	—	—	—	—
University of Ottawa, Ottawa, Ont.	F.	—	—	—	74	2	—	1	132
University of Manitoba, Winnipeg, Man.	M.	44	11	—	—	—	—	—	8
University of Saskatchewan, Saskatoon, Sask.	F.	8	—	—	—	—	3	45	88
University of Alberta, Edmonton, Alta.	M.	43	13	7	—	1	—	10	14
University of British Columbia, Vancouver, B.C.	F.	7	1	—	42	—	—	1	118
University of Toronto, Toronto, Ont.	M.	44	31	15	—	—	—	3	7
University of Ottawa, Ottawa, Ont.	F.	5	—	—	—	—	—	109	109
University of British Columbia, Vancouver, B.C.	M.	—	—	—	—	—	—	16	16
Total		1,702	335	101	757	40	92	807	3,532²

¹ Totals are exclusive of persons teaching in more faculties than one.

² 2,973 males and 559 females.

14.—Universities of Canada: Number of Students

Name and Address of University.	Sex.	Courses leading to Matriculation and other Preparatory Courses.		Arts, Pure Science, Philosophy, etc.	Agriculture.	Architecture.	Commerce.	Dentistry.	Education.	Engineering.	Forestry.
		Undergraduate Courses.	Graduate Courses.								
St. Dunstan's University, Charlottetown, P.E.I.	M.	40	85	56	-	-	-	-	-	-	-
University of King's College, Windsor, N.S.	F.	-	-	38	-	-	-	-	-	-	-
Dalhousie University, Halifax, N.S.	M.	-	197	5	-	-	22	64	-	44	-
Acadia University, Wolfville, N.S.	F.	-	146	1	-	-	2	8	-	29	-
University of St. Francis Xavier, Antigonish, N.S.	M.	86	182	3	-	-	-	-	-	-	-
University of New Brunswick, Fredericton, N.B.	F.	-	30	1	-	-	-	-	-	-	-
University of Mt. Allison, Sackville, N.B.	M.	-	37	-	-	-	-	-	-	55	13
University of St. Joseph's College, St. Joseph, N.B.	F.	-	32	-	-	-	-	-	-	32	-
McGill University, Montreal, Que.	M.	286	109	-	-	-	-	-	-	-	-
University of Bishop's College, Lennoxville, Que.	F.	-	111	2	-	-	-	-	-	-	-
Laval University, Quebec, Que.	M.	-	56	-	-	-	-	-	-	-	-
University of Montreal, Montreal, Que.	M.	-	416	80	59	22	188	131	-	563	-
University of Toronto, Toronto, Ont.	F.	8	271	13	1	-	7	-	-	-	-
Victoria University, Toronto, Ont.	M.	-	29	4	-	-	-	-	-	-	-
University of Trinity College, Toronto, Ont.	F.	-	18	1	-	-	-	-	-	-	-
Western University, London, Ont.	M.	1,180	457	83	138	-	66	-	-	-	30
Queen's University, Kingston, Ont.	F.	-	-	3	-	-	-	-	-	-	-
University of Ottawa, Ottawa, Ont.	M.	2,568	1,199	227	108	14	421	208	301	128	-
McMaster University, Toronto, Ont.	F.	1,568	36	204	-	-	-	-	210	-	-
University of Manitoba, Winnipeg, Man.	M.	-	1,182	223	-	-	-	-	140	740	50
University of Saskatchewan, Saskatoon, Sask.	F.	-	1,105	81	-	-	-	-	159	1	-
University of Alberta, Edmonton, Alta.	M.	-	265	-	-	-	-	-	-	-	-
University of British Columbia, Vancouver, B.C.	F.	-	281	-	-	-	-	-	-	-	-
Total by sex	M.	5,188	7,048	1,024	687	52	798	447	446	2,378	93
	F.	3,377	3,690	421	14	-	23	3	369	1	-
Grand total		8,565	10,738	1,445	701	52	821	450	815	2,379	93

In the Various Faculties, 1922-23.

Household Science.	Law.	Medicine.	Music.	Nursing.	Pharmacy.	Social Service.	Theology.	Veterinary Medicine.	Short or Special Courses for Teachers.	Short or Special Courses, other than Teachers.	Other Short Courses.	Correspondence.	Total, excluding Duplicates.			Number of these also registered in affiliated Colleges.
													Male.	Female.	Total.	
-	-	-	-	-	-	-	-	-	-	50	-	-	231	-	231	-
-	25	-	-	-	-	-	13	-	-	-	-	-	85	24	109	-
-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	61	179	-	-	20	-	-	-	-	-	-	-	581	172	753	-
-	2	12	5	-	1	-	17	-	-	-	-	-	195	98	293	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	150	-	-	419	31	450	-
-	-	-	-	-	-	-	-	-	-	-	-	-	105	32	137	-
-	-	-	-	-	-	-	25	-	-	-	-	-	139	111	250	-
-	-	-	-	-	-	-	5	-	-	-	-	-	349	-	349	-
-	70	707	3	-	40	-	-	-	-	80	912	-	2,685	1,190	3,875	-
68	4	11	121	57	2	22	13	-	-	-	-	-	54	19	73	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	76	177	18	-	10	-	363	-	-	27	-	-	2,136	83	2,219	1,216
-	-	-	31	-	-	-	-	-	-	-	-	-	-	-	-	-
329	128	302	421	132	31	305	19	-	-	63	-	-	6,412	3,011	9,423	7,267
-	-	-	489	2	110	-	-	-	-	-	-	-	-	-	-	-
-	-	911	21	18	-	-	-	-	165	647	-	211	3,232	1,812	6,067 ²	882
-	-	75	26	47	329	-	-	85	-	-	-	-	350	285	635	-
-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	23	-	-	-	-	116	60	176	-
-	-	-	-	-	-	-	6	-	-	-	-	-	-	-	-	-
-	-	153	-	4	-	-	-	-	47	-	75	14	375	164	614 ³	87
-	-	3	-	17	-	-	-	-	-	-	-	-	-	-	-	-
-	-	258	-	-	-	-	14	-	423	-	-	1,317	2,006	582	2,588	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	84	-	-	-	22	-	1,714	1,852	3,566	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	37	-	-	-	-	-	222	99	321	-
-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-
64	63	250	51	-	4	-	-	-	85	507	305	-	2,194	650	2,844	-
-	53	21	49	-	-	-	-	-	132	393	-	-	967	413	1,380	-
-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
-	113	124	48	-	13	-	6	-	116	-	54	158	900	414	1,314	27
36	7	21	-	-	-	-	-	-	208	157	-	-	717	477	1,559 ⁴	-
-	-	-	-	28	-	-	-	-	-	-	-	-	-	-	-	-
-	589	3,061	463	4	350	49	990	19	-	-	-	-	-	-	-	-
555	16	143	672	149	23	461	14	-	-	-	-	-	-	-	-	-
555	605	3,204	1,135	153	373	510	1,004	19	1,176	2,074	1,368	1,700	-	-	39,226	9,479

¹ The University of King's College in 1924 removed to Halifax and entered into federation with Dalhousie University.

² The students in regular courses only were specified by sex in the University of Toronto.

³ 75 in special courses were not specified by sex in Western University.

⁴ In the University of British Columbia 365 in other than regular courses were not specified by sex.

15.—Universities of Canada: Number of Students by Academic Years¹ and Number of Degrees Conferred, 1922-23.

Universities.	Pre-para-tory.	1st year.	2nd year.	3rd year.	4th year.	5th year.	6th year.	7th year.	Grad-uates.	All others.	Total.
St. Dunstan's	—	40	40	43	37	11	—	—	18	42	231
King's College	—	26	33	27	23	—	—	—	—	—	109
Dalhousie	—	—	Not given.		—	—	—	—	—	753	753
Acadia	—	118	59	46	46	—	—	—	5	19	293
St. Francis Xavier	86	82	54	47	29	—	—	—	2	150	450
New Brunswick	—	33	39	29	36	—	—	—	—	—	137
Mount Allison	—	—	Not given.		—	—	—	—	—	250	250
St. Joseph's College	286	22	11	14	9	—	—	—	7	—	349
McGill	—	206	120	88	113	—	—	—	93	3,255	3,875
Bishop's College	8	18	16	18	—	—	—	—	—	13	73
Laval	—	336	257	237	201	—	—	—	—	1,161	2,192
Montreal	4,136	335	310	305	333	250	—	—	87	3,667	9,423
Toronto	—	1,334	888	776	954	208	—	—	306	1,601	6,067
Victoria	—	170	145	102	102	—	—	—	—	116	635
Trinity	—	46	30	22	20	—	—	—	5	53	176
Western	—	127	83	68	51	—	—	—	12	273	614
Queen's	—	—	Not given.		—	—	—	—	—	2,588	2,588
Ottawa	1,147	695	412	304	168	98	56	—	42	644	3,566
McMaster	—	54	56	44	37	—	—	—	46	84	321
Manitoba	—	611	558	404	290	45	—	—	35	901	2,844
Saskatchewan	—	—	Not given.		—	—	—	—	—	1,380	1,380
Alberta	—	260	91	108	72	—	—	—	98	685	1,314
British Columbia	—	556	252	168	166	3	—	—	49	365	1,194

Universities.	Number of Degrees Conferred.		
	Under-graduate.	Graduate.	Total.
St. Dunstan's	—	10	10
King's College	23	17	40
Dalhousie	133	8	141
Acadia	44	5	49
St. Francis Xavier	25	2	27
New Brunswick	33	8	41
Mount Allison	46	2	48
St. Joseph's College	9	2	11
McGill	513	35	548
Bishop's College	15	2	17
Laval	231	90	321
Montreal	230	871	1,101
Toronto	1,344	113	1,457
Victoria	—	4	4
Trinity	—	6	6
Western	86	4	90
Queen's	292	17	309
Ottawa	98	62	160
McMaster	41	8	49
Manitoba	283	15	298
Saskatchewan	112	18	130
Alberta	105	18	123
British Columbia	155	21	176
Total	3,840	1,348	5,188

¹ The academic years refer to Arts and Pure Science, Letters, etc. The terminology of each university is followed; "1st year," therefore, does not mean the same thing in each case, namely a year in Arts or Pure Science after matriculation. In the case of some universities it refers to the first year of secondary work. A true total, therefore, of the students by academic years cannot be given.

16.—Universities of Canada: Financial Statistics, 1922-23.

ASSETS AS AT JUNE 30, 1923.

Name and Address.	Value of Endowments. ¹	Value of Land and Buildings.	Value of Scientific Equipment.	Value of other Property.	Total Assets.
	\$	\$	\$	\$	\$
St. Dunstan's University, Charlottetown, P.E.I.....	—	280,000	5,000	15,000	300,000
University of King's College, Windsor, N.S.....	225,000	200,000	10,000	5,000	440,000
Dalhousie University, Halifax, N.S.....	1,268,000	2,102,000	185,000	—	3,555,000
Acadia University, Wolfville, N.S.....	775,899	801,235	30,000	—	1,607,134
University of St. Francis Xavier, Antigonish, N.S. ²	874,000	463,548	10,000	58,210	1,405,758
University of New Brunswick, Fredericton, N.B.....	30,000	700,000	100,000	100,000	930,000
Mt. Allison University, Sackville, N.B..	520,000	365,180	21,200	21,000	927,380
University of St. Joseph's College, St. Joseph, N.B.....	—	358,757	65,000	36,000	401,257
McGill University, Montreal, Que. ³	17,344,210	8,984,013	1,026,830	—	27,355,053
University of Bishop's College, Lennoxville, Que.....	408,765	262,170	1,050	12,456	684,441
University of Laval, Quebec, Que.....	—	—	—	—	—
University of Montreal, Montreal, Que.....	1,271,895	1,703,475	386,179	90,000	3,451,552
University of Toronto, Toronto, Ont. ⁴	1,908,483	8,250,936	—	9,583	10,169,002
Victoria University, Toronto, Ont.....	1,197,029	1,185,699	—	—	2,382,728
University of Trinity College, Toronto, Ont. ⁵	1,395,069	11,766	40,219	—	1,447,054
Queen's University, Kingston, Ont.....	2,152,538	3,134,585	238,500	—	5,525,623
Western University, London, Ont. ⁶	107,400	900,000	100,000	—	1,107,400
University of Ottawa, Ottawa, Ont.....	—	1,084,000	—	—	1,084,000
McMaster University, Toronto, Ont.....	1,022,159	466,830	20,267	—	1,509,256
University of Manitoba, Winnipeg, Man.....	1,600,000	2,000,000	—	—	3,600,000
University of Saskatchewan, Saskatoon, Sask.....	99,449	3,204,042	—	—	3,303,491
University of Alberta, Edmonton, Alta..	—	3,577,632	540,034	123,508	4,241,174
University of British Columbia, Vancouver, B.C.....	30,500	547,621	211,052	144,913	934,086
Total	32,230,399	40,583,489	2,931,831	615,670	76,361,389

¹ Interest bearing investments.² The value of scientific equipment of St. Francis Xavier University, including the building is \$110,000.³ Including Macdonald College and Royal Victoria College.⁴ The value of lands and buildings of the University of Toronto includes scientific equipment; that of endowments includes cash on hand.⁵ Value of equipment (\$40,219) includes other equipment as well as scientific.⁶ The total assets of Western University do not include the value of the library.

RECEIPTS AND EXPENDITURES.

Name and Address.	Receipts.					Expenditure.		
	Investments.	Government and Municipal Grants.	Fees.	Other Sources.	Total.	Current.	Capital.	Total.
St. Dunstan's University, Charlottetown, P.E.I.....	\$	\$	\$	\$	\$	\$	\$	\$
University of King's College, Windsor, N.S..... <td>—</td> <td>—</td> <td>45,000</td> <td>—</td> <td>45,000</td> <td>45,000</td> <td>—</td> <td>45,000</td>	—	—	45,000	—	45,000	45,000	—	45,000
Dalhousie University, Halifax, N.S..... <td>43,796</td> <td>—</td> <td>24,412</td> <td>8,989</td> <td>77,197</td> <td>74,653</td> <td>—</td> <td>74,653</td>	43,796	—	24,412	8,989	77,197	74,653	—	74,653
Acadia University, Wolfville, N.S..... <td>64,497</td> <td>1,200</td> <td>101,894</td> <td>9,943</td> <td>177,534</td> <td>191,600</td> <td>324,000</td> <td>515,600</td>	64,497	1,200	101,894	9,943	177,534	191,600	324,000	515,600
University of St. Francis Xavier, Antigonish, N.S..... <td>43,104</td> <td>—</td> <td>28,846</td> <td>9,854</td> <td>81,804</td> <td>89,148</td> <td>9,870</td> <td>99,018</td>	43,104	—	28,846	9,854	81,804	89,148	9,870	99,018
University of New Brunswick, Fredericton, N.B..... <td>10,578</td> <td>963</td> <td>61,503</td> <td>20,614</td> <td>93,658</td> <td>87,686</td> <td>—</td> <td>87,656</td>	10,578	963	61,503	20,614	93,658	87,686	—	87,656
Mt. Allison University, Sackville, N.B..... <td>2,847</td> <td>25,000</td> <td>11,789</td> <td>947</td> <td>40,583</td> <td>44,619</td> <td>—</td> <td>44,619</td>	2,847	25,000	11,789	947	40,583	44,619	—	44,619
	31,207	6,140	18,581	37,283	93,211	86,069	—	86,069

16.—Universities of Canada: Financial Statistics, 1922-23—concluded.

RECEIPTS AND EXPENDITURES.

Name and Address.	Receipts.					Expenditure.		
	Investments.	Government and Municipal Grants.	Fees.	Other Sources.	Total.	Current.	Capital.	Total.
University of St. Joseph's College, St. Joseph, N.B.....	\$ -	\$ -	\$ 69,460 ¹	\$ 12,000	\$ 81,460	\$ 70,043	\$ 21,013	\$ 91,056
McGill University, Montreal, Que.....	975,036	54,900	561,203	131,625	1,722,764	1,664,988	455,350	2,120,338
University of Bishop's College, Lennoxville, Que.....	18,586	3,500	19,980	2,278	44,344	57,422	-	57,422
University of Laval, Quebec, Que.....	-	-	-	-	-	-	-	-
University of Montreal, Montreal, Que.....	84,520	73,394	144,545	21,428	323,887	306,728	74,661	381,384
University of Toronto, Toronto, Ont.....	62,386	2,297,000 ²	380,327	111,472	2,851,185 ²	1,887,924	537,669	2,425,593
Victoria University, Toronto, Ont.....	74,588	-	20,961	46,886	142,435	159,312	-	159,312
University of Trinity College, Toronto, Ont.	67,125	-	38,809	8,043	113,977	113,977	-	113,977
Queen's University, Kingston, Ont.....	51,402	211,000	167,884	75,646	505,932	504,432	-	504,432
Western University, London, Ont.....	6,060	1,291,800	42,195	7,719	1,347,774	247,172	666,621	913,793
University of Ottawa, Ottawa, Ont.....	-	-	102,754	48,000	150,754	175,000	-	175,000
McMaster University, Toronto, Ont.....	51,056	-	33,231	-	84,287	90,359	-	90,359
University of Manitoba, Winnipeg, Man.....	35,800	350,000	121,958	2,353	510,111	479,840	-	479,840
University of Saskatchewan, Saskatoon, Sask.	1,314	973,845	27,079	11,946	1,014,184	546,586	441,355	987,941
University of Alberta, Edmonton, Alta.....	43,498	696,141	58,793	522,570	1,099,752	1,040,873	43,498	1,084,371
University of British Columbia, Vancouver, B.C.....	26,400	445,000	61,739	20,230	553,369	508,902	37,686	546,588
Total	1,693,800	6,429,883	2,142,943	1,109,826	11,155,202	8,472,328	2,611,723	11,084,051

¹ Including board.² Includes special grants from the Legislature of Ontario as follows: \$880,000 to cover deficit, \$700,000 for building programme, \$210,000 for purchase of property.

17.—Colleges of Canada: Foundation, Affiliation, Faculties and Degrees.

Name and Address.	Date of		University Affiliation.	Faculties.	Degrees.
	Original Foundation.	Present Charter.			
Prince of Wales College, Charlottetown, P.E.I.	1836	1860	Practically all Canadian Universities.	Arts.	-
Presbyterian College, Halifax, N.S.	1820	-	Dalhousie.	Theology.	D.D., B.D.
College of Saint Anne, Church Point, N.S.	1890	1892	-	Arts, Science.	B.A., B.Sc., M.A.
Technical College, Halifax, N.S.	1907	-	Acadia, King's, St. Mary's, Dalhousie, Mt. Allison, St. Francis Xavier.	Engineering.	B. Sc. in M.E., C. E., E.E., Mch. E.
Agricultural College, Truro, N.S.	1888	1905	-	Agriculture.	Associate Diploma.
Holy Heart Theological College, Halifax, N.S.	1894	1906	-	Theology, Philosophy.	T.B., T.L., D.D., Ph. D.

17.—Colleges of Canada: Foundation, Affiliation, Faculties and Degrees—con.

Name and Address.	Date of		University Affiliation.	Faculties.	Degree
	Original Foundation.	Present Charter.			
St. Mary's College, Halifax, N.S.	1841	1841	—	Arts, Partial Course in Engineering.	B.A.
Macdonald College, Ste. Anne de Bellevue, Que.	1907	—	McGill.	Agriculture, Household Science.	M.S.A., B.H.S., B.S.A., B. Sc. in Agr.
Ecole Des Hautes Etudes Commerciales, Montreal, Que.	1907	1907	Laval.	Commerce.	L.S.C., C.L.
Stanstead Wesleyan College, Stanstead, Que.	1872	1872	—	Arts, Commercial, Music.	Diploma.
Presbyterian College, Montreal, Que.	1865	1865	McGill.	Theology.	B.D., D.D.
Congregational College of Canada, Montreal, Que.	1839	Amended 1864 & 1889 1879	McGill.	Theology.	B.D., D.D.
Montreal Diocesan Theological College, Montreal, Que.	1873	—	McGill.	Divinity.	B.D., D.D.
Wesleyan Theological College, Montreal, Que.	1872	1879	McGill.	Theology.	B.D., S.T.D., D.D.
Wycliffe College, Toronto, Ont.	1879	1916	Toronto.	Theology.	L. Th., B.D., D.D.
Knox College, Toronto, Ont.	1843	1858	Toronto.	Theology.	B.D., D.D.
St. Michael's College, Toronto, Ont.	1852	—	Toronto.	Arts.	B.A., M.A., Ph. D. ¹
Ontario Agricultural College, Guelph, Ont.	1874	1874	Toronto.	Agriculture, Domestic Science, Manual Training.	B.S.A.
Ontario College of Art ² , Toronto, Ont.	1912	1912	—	—	Diploma.
Ontario Law School, Osgoode Hall, Toronto, Ont.	—	—	—	—	—
Toronto Bible College, Toronto, Ont.	—	—	—	—	—
Ontario College of Pharmacy, Toronto, Ont.	1871	1884	Toronto.	Pharmacy.	Phm. B. ³
Royal College of Dental Surgeons of Ontario, Toronto, Ont.	1868	1911	Toronto.	Dentistry.	L.D.S. ⁴
Ontario Veterinary College, Guelph, Ont.	1862	Taken over by Government in 1908 1912	Toronto.	Veterinary.	V.S. ⁵
Waterloo College, Lutheran Theological Seminary, Waterloo, Ont.	1911	—	—	Arts, Theology.	B.A., M.A.
Huron College, London, Ont.	1863	1863	Western University.	Theology.	Diploma with title L. Th. ⁶
St. Jerome's College, Kitchener, Ont.	1864	1866	—	Arts, Scholastic Philosophy.	—
Royal Military College, Kingston, Ont.	1875	—	—	—	Diploma and Diploma with Honours.
Brandon College, Brandon, Man.	1899	—	McMaster.	Arts, Theology, Academic, Business, Music.	B. A. by McMaster University.
The Manitoba Law School, Winnipeg, Man.	1914	—	Manitoba.	Law.	LL. B. by University.
Wesley College, Winnipeg, Man.	1877	1877	Manitoba.	Arts, Theology, Matriculation.	B.D., D.D. ⁷
Manitoba College, Winnipeg, Man.	1871	—	Manitoba.	Theology.	B.D.
Manitoba Agricultural College, Winnipeg, Man.	1903	—	Manitoba.	Agriculture, Home Economics.	B.S.A.
St. John's College, Winnipeg, Man.	1866	—	Manitoba.	—	B.D.
Emmanuel College, Saskatoon, Sask.	1879	1883	Saskatchewan.	Divinity.	L. Th., B.D., D.D.

17.—Colleges of Canada: Foundation, Affiliation, Faculties and Degrees—concluded.

Name and Address.	Date of		University Affiliation.	Faculties.	Degrees.
	Original Foundation.	Present Charter.			
Presbyterian Theological College, Saskatoon, Sask.	1911	—	Saskatchewan.	Divinity.	B.D., D.D.
St. Chad's College, Regina, Sask.	1907	—	Saskatchewan.	Divinity.	—
Edmonton Jesuit College, Edmonton, Alberta.	1913	1913	Laval.	Preparatory, Commercial, Classical.	—
Robertson College, Edmonton (South), Alberta.	1910	1916	Alberta.	Theology.	D.D.
Institute of Technology and Art, Calgary, Alberta.	1916	—	—	Technical Courses.	—
The Anglican Theological College, Vancouver, B.C.	—	—	—	—	—
Columbian Methodist College, New Westminster, B.C.	1892	1893	Toronto.	Academic, Music, Business.	Diplomas:
Royal Naval College, Esquimalt, B.C.	1911	—	—	—	Midshipman, R.C. N.
Victoria College, Victoria, B.C.	—	—	British Columbia.	Arts and pure Science.	—

¹Degrees conferred by the University of Toronto. ²Succeeding Ontario School of Art founded in 1876. ³The University of Toronto grants the degree Phm. B. ⁴The degree of D.D.S. is conferred by the University of Toronto. ⁵The degrees of B.V. Sc. and D.V. Sc. are conferred by the University of Toronto. ⁶Degrees in Arts and Theology are conferred by the Western University. ⁷The degree of B.A. is conferred by the University of Manitoba.

NOTE.—In addition to the above colleges there are 21 classical colleges and 2 agricultural colleges in the province of Quebec. The classical colleges, with the dates of their foundation, are as follows: Chicoutimi (1873), Joliette (1846), L'Assomption (1832), Lévis (1853), Mont Laurier (1910), Montreal (Loyola) (1896), Montreal (Ste. Marie) (1848), Montreal (St. Sulpice) (1767), Nicolet (1893), Quebec Petit Séminaire (1663), Rigaud (1851), Rimouski (1855), St. Alexandre de la Gatineau (1911), Ste. Anne de la Pocatière (1827), St. Hyacinthe (1811), St. Jean (1911), St. Laurent (1847), Ste. Thérèse (1825), Sherbrooke (1875), Trois Rivières (1860), and Valleyfield (1893). The two agricultural colleges are the Institut d'Oka and the agricultural school at Ste. Anne de la Pocatière. Of the 9,321 pupils in the classical colleges in 1922, 706 were in primary courses, 2,535 in commercial courses and 6,030 in classical courses. Of the last mentioned, 269 were in colleges affiliated or annexed and 123 in colleges associated with Laval University. These were evidently doing work of university grade.

18.—Professional and Affiliated Colleges of Canada: Number of Teaching Staff and Students, 1922-23.

Name and Address.	Number of Teaching Staff.			Number of Students.		
	Male.	Female.	Total.	Male.	Female.	Total.
Prince of Wales College, Charlottetown, P.E.I. (1922)	7	3	10	129	218	347
Presbyterian College, Halifax, N.S.	5	—	5	33	2	35
College of Ste. Anne, Church Point, N.S.	11	—	11	143	—	143
Technical College, Halifax, N.S.	28	19	47	—	—	585
Agricultural College, Truro, N.S.	16	—	16	194	326	520
Holy Heart Theological College, Halifax, N.S.	10	—	10	77	—	77
St. Mary's College, Halifax, N.S.	14	—	14	206	—	206
Macdonald College, Ste. Anne de Bellevue, Que.	46	22	68	333	450	783

18.—Professional and Affiliated Colleges of Canada: Number of Teaching Staff and Students, 1922-23—concluded.

Name and Address.	Number of Teaching Staff.			Number of Students.		
	Male.	Female.	Total.	Male.	Female.	Total.
Ecole des Hautes Etudes Commerciales, Montreal, Que.....	20	—	20	407	14	421
Presbyterian College, Montreal, Que.....	7	—	7	56	—	56
Congregational College of Canada, Montreal, Que.....	2	—	2	16	—	16
Montreal Diocesan Theological College, Montreal, Que. (1922).....	6	—	6	26	—	26
Wesleyan Theological College, Montreal, Que.....	4	—	4	157	—	157
Chicoutimi Classical College.....	45	—	45	573	—	573
Joliette Classical College.....	45	—	45	408	—	408
L'Assomption Classical College.....	38	—	38	380	—	380
Lévis Classical College.....	57	—	57	754	—	754
Mont Laurier Classical College.....	18	—	18	146	—	146
Montreal (Loyola) Classical College.....	28	—	28	363	—	363
Montreal (Ste. Marie) Classical College.....	35	—	35	687	—	687
Montreal (St. Sulpice) Classical College.....	29	—	29	400	—	400
Nicole Classical College.....	50	—	50	360	—	360
Quebec (Petit Sémi.) Classical College.....	61	—	61	821	—	821
Rigaud Classical College.....	39	—	39	301	—	301
Rimouski Classical College.....	38	—	38	287	—	287
St. Alexandre de la Gatineau Classical College.....	15	—	15	205	—	205
Ste. Anne de la Pocatière Classical College.....	43	—	43	595	—	595
St. Hyacinthe Classical College.....	38	—	38	447	—	447
St. Jean Classical College.....	32	—	32	288	—	288
St. Laurent Classical College.....	55	—	55	579	—	579
Ste. Thérèse Classical College.....	25	—	25	396	—	396
Sherbrooke Classical College.....	50	—	50	497	—	497
Trois Rivières Classical College.....	43	—	43	464	—	464
Valleyfield Classical School.....	35	—	35	274	—	274
Oka Agricultural School.....	42	—	42	111	—	111
Ste. Anne de la Pocatière Agricultural School.....	34	—	34	203	—	203
Weybiffe College, Toronto, Ont. (1921).....	11	1	12	59	—	59
Knox College, Toronto, Ont.....	13	—	13	144	22	166
St. Michael's College, Toronto, Ont.....	22	10	32	350	110	460
Ontario Agricultural College, Guelph, Ont.....	54	11	65	865	705	1,570
Ontario College of Art, Toronto, Ont.....	20	15	35	247	472	719
Ontario College of Pharmacy, Toronto, Ont.....	4	—	4	122	27	144
Ontario Law School, Osgoode Hall, Toronto, Ont.....	6	—	6	321	15	336
Toronto Bible College, Toronto, Ont.....	6	—	6	156	387	543
Royal College of Dental Surgeons, Toronto, Ont.....	76	7	83	765	12	777
Royal Veterinary College, Guelph, Ont.....	16	—	16	84	—	84
Waterloo College, Lutheran Theological Seminary, Waterloo, Ont.....	7	—	7	55	—	55
Huron College, London, Ont.....	4	—	4	24	1	25
St. Jerome's College, Kitchener, Ont.....	10	—	10	185	—	185
Royal Military College, Kingston, Ont.....	25	—	25	155	—	155
Brandon College, Brandon, Man.....	13	8	21	140	199	339
Manitoba Law School, Winnipeg, Man.....	10	—	10	75	2	79
Wesley College, Winnipeg, Man.....	18	5	23	241	218	459
Manitoba College, Winnipeg, Man.....	5	1	6	12	3	15
Manitoba Agricultural College, Winnipeg, Man.....	32	8	40	549	455	1,004
Emmanuel College, Saskatoon, Sask.....	4	—	4	41	—	41
Presbyterian Theological College, Saskatoon, Sask.....	4	—	4	47	2	49
St. Chad's College, Regina, Sask.....	6	—	6	14	—	14
St. Chad's College, Regina, Sask.....	7	2	9	97	31	128
Alberta College, Edmonton (South), Alberta.....	20	—	20	180	—	180
Edmonton Jesuit College, Edmonton, Alberta.....	3	—	3	9	—	9
Robertson College, Edmonton (South), Alberta.....	19	—	19	657	—	657
Institute of Technology and Art, Calgary, Alberta.....	19	—	19	657	—	657
The Anglican Theological College of B.C., Vancouver, B.C.....	6	—	6	18	—	18
Columbian Methodist College, New Westminster, B.C.....	9	12	21	57	90	147
Total.....	1,513	124	1,637	17,075	3,756	21,416

19.—Colleges of Canada: Financial Statistics, 1922-23.

Name and Address.	Total Value of Property.	Total Income.	Total Expenditure.
	\$	\$	\$
Presbyterian College, Halifax, N.S.....	339,615	29,757	35,825
College of Ste. Anne, Church Point, N.S.....	203,000	18,000	18,000
Technical College, Halifax, N.S.....	460,000	147,409	151,814
Agricultural College, Truro, N.S.....	425,000	69,707	73,228 ¹
Holy Heart Theological College, Halifax, N.S.....	300,000	17,325	23,125
St. Mary's College, Halifax, N.S.....	153,000	26,850	27,001
Macdonald College, Ste. Anne de Bellevue, Que.....	7,750,000	438,000	454,546
Ecoles des Hautes Etudes Commerciales, Montreal, Que.....	696,938	75,838	91,144
Presbyterian College, Montreal, Que.....	561,271	29,789	39,463
Congregational College of Canada, Montreal, Que.....	225,064	14,066	14,071
Knox College, Toronto, Ont.....	1,163,727	48,037	48,801
Ontario Agricultural College, Guelph, Ont.....	2,000,000 ²	353,072	353,072
Ontario College of Art, Toronto, Ont.....	124,781	37,728	37,343
Ontario Law School, Toronto, Ont.....	—	51,149	26,332
Toronto Bible College, Toronto, Ont.....	100,000	16,586	16,519
Royal College of Dental Surgeons of Ontario, Toronto, Ont.....	475,000	241,876	207,808
Ontario Veterinary College, Guelph, Ont.....	285,000	56,575	48,000
Huron College, London, Ont.....	132,793	18,630	18,555
St. Jerome's College, Kitchener, Ont.....	290,000	47,000	47,000
Brandon College, Brandon, Man.....	—	17,045	17,045
The Manitoba Law School, Winnipeg, Man.....	1,057,784	58,491	76,179
Wesley College, Winnipeg, Man.....	506,378	42,719	57,574
Manitoba College, Winnipeg, Man.....	4,000,000	270,959	270,959
Emmanuel College, Saskatoon, Sask.....	89,000	27,598	27,598
St. Chad's College, Regina, Sask.....	137,384	9,748	9,768
Collège Catholique de Gravelbourg, Sask.....	144,063	37,349	37,349
Alberta College, Edmonton (South), Alta.....	186,000	11,025	11,450
Edmonton Jesuit College, Edmonton, Alta.....	201,000	41,285	41,105
Robertson College, Edmonton (South), Alta.....	70,258	11,098	7,633
Anglican Theological College of B.C., Vancouver, B.C.....	73,243	12,652	13,792
Columbian Methodist College, New Westminster, B.C.....	145,469	9,716	8,736
Total.....	22,486,768	2,287,076	2,305,073

¹Net expenditure after receipts from farm to the amount of \$13,696, forwarded to the government, were deducted.

²Figures of 1922.

IV.—MISCELLANEOUS EDUCATIONAL ACTIVITIES.

1.—Scientific and Industrial Research in Canada.

Prior to 1870, the basis of research in Canada was observation and record rather than experiment. Fifty years ago, laboratories, except elementary ones of scant accommodation, were non-existent. The courses in science in the universities did not, before 1878, involve any practical work beyond extremely simple demonstrations. The industries did not concern themselves with scientific investigation, and research was not regarded as an essential feature of the work of the Government Departments, except possibly in the Geological Survey.

Scientific research in Canada began in the "eighties", with the institution in the universities of courses in experimental and practical science. Many of the investigators of Canadian origin who have distinguished themselves in the field of science within the last thirty years owe their incentive toward research to the outlook developed by these new courses.

Since 1890, Canadian universities have steadily increased their equipment for scientific teaching and research. While many of the teachers have had little time for research or for advanced courses, scientific investigators in Canadian universities have made valuable contributions to the literature of the sciences, and many of them have achieved high distinction.

Scientific societies, such as the Royal Canadian Institute, founded in 1849, and the Royal Society of Canada, founded in 1881, also promote research through the publication of papers giving the results of researches in the various departments of science, and through the distinction conferred by membership in such societies.

Various departments of the Dominion and Provincial Governments have maintained scientific laboratories. Some of these have been concerned merely with routine examination or analysis, but in many cases research was undertaken. The research activities of the Government Departments have, however, been inadequate to meet the needs of the situation. Less than five years ago, it was estimated that the amount expended annually by Government laboratories for investigations of all kinds was less than \$325,000, of which less than \$100,000 was actually expended for research in Government laboratories.

Twenty years ago the value of research was not appreciated by Canadian industries. A number of firms had routine testing or assay laboratories, but until 1905 there were none which employed research for the improvement of their manufacturing processes or of their products. The example of foreign firms has to some extent altered public opinion in Canada on this question, but the number of Canadian firms which apply research to their industrial problems is still very small. In 1917 the Research Council of Canada issued a questionnaire to the industries. Replies received from 2,400 of the leading firms in Canada showed that only 37 had laboratories for research; 83 employed as many investigators and 276 assistants, but the great majority of these were engaged only in routine examinations. Apart from salaries, the total amount expended in 1916 for research by all firms listed did not exceed \$135,000.

With the growth of Canadian wealth and of the industries of the nation, the scientific equipment of the leading Canadian universities has been greatly increased during the past decade, and scientific researches of a considerable scale are now being carried on, as a result of the research scholarships granted by the Research Council of Canada, or endowed by various wealthy benefactors in the leading universities of the country. An especially notable achievement is the discovery of insulin, a preparation which indefinitely prolongs the lives of those suffering from diabetes, by Dr. F. G. Banting and Mr. C. H. Best, working under the supervision of Prof. J. J. R. Macleod, Professor of Physiology in the University of Toronto. The Nobel prize in medicine for 1923 was awarded to Dr. Banting and Dr. Macleod for this discovery, and in the same year Parliament voted to Dr. Banting a life annuity of \$7,500, to enable him to devote himself entirely to medical research.

The importance of scientific and industrial research has been recognized in recent years by the creation of the Honorary Advisory Council for Scientific and Industrial Research, commonly known as the Research Council of Canada. Brief accounts of the work carried on by the Research Council, as well as of the more general investigations of the Royal Society of Canada and of the Royal Canadian Institute, are appended.

1.—The Honorary Advisory Council for Scientific and Industrial Research.¹

When the war broke out in 1914, the mutual inter-dependence of the great nations of the world was brought forcibly home to them through the lack of materials essential to the prosecution of the war, the scarcity of information on technical subjects which had become the specialties of individual countries, and the need of

¹Contributed by the Honorary Advisory Council for Scientific and Industrial Research.

trained men to direct and operate the industries which were so urgently required at that time. To correct such a deplorable condition, Great Britain organized the technical and commercial leaders of the country into an Advisory Council for Scientific and Industrial Research. The British Dominions were invited to establish similar organizations to co-operate in the work, and as a result the Canadian Government created a Canadian Council of the same name and general character, ordinarily known as the Research Council of Canada.

After a thorough investigation of Canadian industry, the Research Council recommended that immediate steps be taken to provide for intensive research in such directions as would make for the most rapid development of the natural resources and related industries of the country. For the prosecution of such research it was suggested that there be created by the Government a Research Institute, so equipped and staffed that investigations of all kinds could be carried out there under the direction of the best technical advice in the country. This recommendation was favourably received by the Government, and a Bill was introduced into the House of Commons designed to bring about the establishment of such an institute. The Bill was given the support of all parties in the House of Commons, but was rejected by the Senate, on the ground of economy.

The Government, however, recognizing that the Research Council was doing a useful work, has voted annually the sum of \$120,000 for the prosecution of such aims as could be furthered without the acquisition of land, buildings, apparatus or equipment of any kind. This annual appropriation is at present available for the work of the Research Council, and with these limited facilities at its disposal it has endeavoured to meet the most urgent of the many problems which need investigation, in the hope that Canada will become so alive to the necessity for adequate study and investigation of her natural resources and of the technical problems which confront her industries, that ample means will be provided for this important work.

In July, 1924, a revised Research Council Act (14-15 Geo. V, c. 64) was passed by Parliament, under which the membership of the Council is increased to fifteen persons, who serve without remuneration; the Council is constituted a corporate body and given charge of all matters affecting scientific and industrial research in Canada which may be assigned to it, and is also charged with the duty of advising the Dominion Government on questions of scientific and technological methods affecting the expansion of Canadian industries or the utilization of the natural resources of the country.

The Research Council has also been charged, under the above Act, with the following specific duties:

To undertake to promote the utilization of the natural resources of Canada;

To undertake researches with the object of improving the technical processes and methods used in the industries of Canada, and of discovering processes and methods which may promote the expansion of existing or the development of new industries;

To undertake investigation and determination of standards and methods of measurements, including length, volume, weight, mass, capacity, time, heat, light, electricity, magnetism and other forms of energy; and the determination of physical constants and the fundamental properties of matter;

To undertake the standardization and certification of the scientific and technical apparatus and instruments for the Government service and for use in the industries of Canada; and the determination of the standards of quality of the materials used in the construction of public works and of the supplies used in the various branches of the Government service;

To undertake the investigation and standardization, at the request of any of the industries of Canada, of the materials which are or may be used in, or of the products of the industries making such a request;

To undertake researches, the object of which is to improve conditions in agriculture.

The Act also provides that the Research Council shall have charge of and direction or supervision over the researches which may be undertaken by or for single industrial firms, or by such organizations or persons as may desire to avail themselves of the facilities offered for this purpose. The Council is also empowered to publish from time to time such scientific and technical information as it may deem necessary.

It is evident that in order to carry out all of its duties the Research Council would require just such apparatus, equipment and facilities as would be provided in a Research Institute. Pending the provision of such facilities, however, the Council is working along the following chief lines of endeavour:

(1) *Training of research workers.*—Most of the research work done in Canada up to the present time has been carried out in the laboratories of the large universities, where the professors and other officers of instruction have devoted most of their spare time to the solution of technical and scientific problems. Private subscription has to some extent provided the means of employing recent graduates to assist experienced research workers, and this, though on a very limited scale, has been the means of developing some excellent research talent. Recognizing the value of this work in training the right kind of men for research in scientific and industrial laboratories, the Research Council has devoted about one-third of its annual appropriation to provide bursaries, studentships and fellowships for the purpose of enabling a larger number of graduates to follow up this line of work. In all 201 awards have been made to 117 persons at 18 universities. Of these 117 grantees, 29 are engaged in teaching, mostly in our universities, 17 have taken positions in various industries, 16 are employed in technical work of the Dominion and Provincial Governments and nearly all the others are continuing their post-graduate studies.

(2) *Assisted researches.*—The successful prosecution of scientific research demands the attention of the most highly trained specialists available. In order to secure the services of the most highly qualified men available in Canada for such work, the Research Council has adopted the plan of awarding grants which they may secure to assist in the prosecution of approved investigations, and which may be used by them to purchase special scientific equipment or to secure the services of qualified assistants to work under their supervision.

(3) *Associate committees.*—The spirit of co-operation shown by the leaders in industry and science has made it possible for the Research Council to form advisory committees of specialists in various branches of industry and science to confer with the members of the Research Council on the various problems which are brought up for consideration. Like the members of the Council itself, these members of the associate committees serve without remuneration. Through them, problems are brought to the attention of the Council and through them also, industry is being made acquainted with the service which the Council can render to the country at large.

2.—The Royal Society of Canada.¹

The Royal Society of Canada owes its inception to the interest in the literary and scientific development of Canada shown by the Marquis of Lorne during his tenure of the office of Governor-General of Canada. On his initiative, a meeting of men prominent in Canadian literature and science was held at Montreal in December, 1881, and at this meeting the society was organized, its first regular meeting being held at Ottawa in the May following (1882).

The aims of the society, as set forth in the Act of Incorporation, passed by the Dominion Parliament in 1883 (46 Vict., c. 46), are: (1) to encourage studies and investigations in literature and science; (2) to publish original papers by members of the society and documents relative to Canadian affairs that are deemed worthy of publication; (3) to offer prizes and other inducements for papers of merit on subjects relating to Canada and to aid in bringing promising researches to completion; (4) to aid in the formation of a Canadian museum of archives, ethnology, archæology and natural history.

In fulfilment of these aims the society holds an annual meeting in May at Ottawa, for the reading of papers and discussion, occasionally adjourning to other cities such as Toronto, Montreal or Quebec, the meeting of 1924 having been held in the last-named city. For convenience, the society is divided into five sections, of which section 1 is devoted to French literature (including history, archæology, etc.); section 2 to English literature (including history, economics, archæology, etc.); section 3 to the mathematical, physical and chemical sciences; section 4 to geology and mineralogy; and section 5 to the biological sciences. Membership in the various sections is strictly limited, being fixed at forty for sections 1, 4 and 5, and at fifty for sections 2 and 3, and candidates for membership must be nominated by three members of the section to which they desire election and must set forth fully their qualifications for membership. Election is determined by a majority vote of the members of the section concerned, subject to ratification by the council of the society.

Beginning with 1882, the society has published annually a volume of proceedings and transactions, in which are included the papers presented each year to the various sections. By exchange of the transactions with other learned societies and by donations, the society is rapidly accumulating a valuable library.

For financial reasons the society has been unable to carry out to any considerable extent the third of its aims, as stated above. It receives annually a grant from the Dominion Government, but this barely suffices to pay the expenses of publication and leaves nothing for the subvention of promising investigations. At the last annual meeting, however, the society received, through the generosity of Sir Joseph Flavelle, an endowment for a gold medal to be awarded for meritorious achievement in literature or science, and it is thereby placed in a position to manifest its appreciation and encouragement of outstanding work.

The question of a national museum has seriously engaged the attention of the Society, but so far, for various reasons, little progress has been made towards the realization of such an institution, so important a factor in the general education of the community and so valuable an aid in the investigation of the natural resources of the country.

¹Contributed by Prof. J. Playfair McMurrich, M.A., Ph.D., LL.D., F.R.S.C., Past President of the Royal Society of Canada.

3.—The Royal Canadian Institute.¹

The Canadian Institute was organized in 1849 by a group of men interested chiefly in engineering, prominent among whom were Sir Sandford Fleming, Sir William Logan and Kivas Tully, C.E. The object was to create an institute for the encouragement and diffusion of the knowledge of the applications of science, especially to engineering problems, and to this end meetings were held regularly for the reading and discussion of papers and plans were laid for the formation of a library of maps, drawings, models and technical publications and of a museum of geological and other specimens, together with a collection of philosophical instruments.

The institute was incorporated by Royal Charter in 1851, and in 1914 it received the gracious permission of the King to add the designation "Royal" to its title. The original organization of the institute did not result in complete success and in later years it broadened its scope to include the reading and discussion of papers on pure science and on literary questions. The meetings have always been open to the public without charge; they are at present held weekly during the winter months and in recent years have been devoted to the presentation of the results of scientific investigations in various lines by experts who have themselves contributed to the advancement of knowledge. These meetings have proved very popular, the average attendance during the winter of 1923-24 having been considerably over 500, and serve a useful purpose in familiarizing the public with the recent achievements of science and in awakening and developing an appreciation of the value of scientific research and its bearings on the progress of industrial prosperity and modern civilization.

In 1852 the Institute began the publication of a Canadian "Journal of Science, Literature and History," of which eighteen volumes had appeared up to 1878 when publication was suspended. In 1884, however, it was resumed, the title being changed to "Proceedings of the Canadian Institute," and after 1889 to "Transactions of the Canadian Institute"; since that date a volume has appeared annually. The importance of this publication is two-fold, in that it is one of the few Canadian media for the publication of scientific memoirs and in that it has enabled the institute to accumulate, by exchange with other scientific and technical societies, a valuable library of about 10,000 volumes, valuable especially because it consists largely of publications not easily procurable otherwise than by exchange, and yet essential for guidance in research. The exchanges are made with societies of all the countries of the civilized world and produce an addition to the library of over 2,000 items annually. In connection with the library, the institute maintains a reading-room where its members may consult the recent accessions as well as the current numbers of the more important literary and scientific magazines.

The financial resources of the institute consist of a small annual grant from the Ontario Legislature and a small endowment fund, but are chiefly supplied by the annual dues of the members. At present the ordinary membership is approximately 600 and the annual subscription is fixed at \$5.00; there are also associate and junior members whose annual subscription is set at \$2.50. The headquarters of the Institute are located at 198 College St., Toronto.

The income of the institute at present barely suffices for the maintenance of its present activities. In the past it has proved an important factor in scientific development in Canada. Several important scientific movements owe their

¹Contributed by Prof. J. Playfair McMurrich, M.A., Ph.D., LL.D., F.R.S.C.

initiation to the institute, notably the adoption of standard time, and it has been an important influence in bringing to Canada the meetings of important scientific organizations, such as the International Geological Congress in 1913, the American Association for the Advancement of Science in 1921 and the British Association for the Advancement of Science and the International Mathematical Congress in 1924. Its members hope for an extension of its activities in the future and dream of its becoming an organization that will do for Canada what the Royal Institution has done for Great Britain. The realization of this dream can come, however, only when, by public or private generosity, the Institute has been placed in possession of an ample endowment.

2.—Public Libraries in Canada.

Under the above heading, a short article appeared on pp. 168-9 of the 1921 edition of the Year Book. Because of the pressure upon the space of the Year Book it is not repeated here.

3.—Art in Canada.

After passing through the inevitable stages of first complete and then partial dependence on the traditions of the older European countries, Canadian art today, particularly in painting, but in the other arts as well to some lesser extent, is adding something of its own to these traditions. The movement is taking the form of a dominating sense of decoration and a greater searching for and insistence upon the essentials of form and colour in its rendering of nature.

It is interesting and significant, therefore, to quote briefly from some of the most important of the British art critics on the subject of the Canadian Art Section at the British Empire Exhibition:

"Emphatic design and bold brushwork are the characteristics of the Canadian section; and it is here in particular that the art of the Empire is taking a new turn. The influence suggested is that of Russia—as exemplified by such painters as Roerich—but it is likely that the effect is due chiefly to a certain similarity in the landscape of the two countries. At any rate, there can be no question that Canada is developing a school of landscape painters who are strongly racy of the soil."—*The Times*.

"The first impression of the Canadian Galleries is that there is emerging a native school of landscape, awaiting a wider recognition abroad, as (we gather) it has had to wait the encouragement of collectors at home A further impression is that Canada's great distances and conditions of life generally are throwing her painters, sometimes self-taught, but with great natural gifts, into a solitary and intense contact with their landscape themes. Tom Thomson, for example, of whom there is a remarkable representation in these galleries, was obviously, from all we hear of him, a true pioneer of Canadian art."—*The Morning Post*.

"Their bold, decorative landscapes, emphasizing colour, line and pattern, giving the very look and feel of Canada, its colour and character; young artists painting a young country superbly, through their temperaments, not literally—the subtleties of its winter snow, the roar of its weather, the glory of its autumn colour, contained in the kind of decorative patterns that the younger artists of France are pursuing. But these Canadians are standing on their own feet, revealing their

own country with gay virility These Canadian landscapes, I think, are the most vital group of paintings produced since the war—indeed, this century.”—*The Daily Chronicle*.

“With Canada, however, we are in a happier position. We can sincerely acclaim a vigorous and original art. Two modes of feeling emerge strongly; a fine decorative sense and a passionate preoccupation with the stress of growth.”—*The Saturday Review*.

It cannot fail to be seen from such comments that the British critics are of the opinion that Canada is developing something of a national and original school of painting. While the future will bring more complete proof of this, it is inspiring to record it, because nothing could be calculated to give more impetus to the growth of a proper understanding and appreciation of Canadian art than such a verdict, which gives it, for the first time, a status in the critical eyes of the artistic world.

Public appreciation of Canadian art is very much in its infancy and there is a very great need of education to show the prospective collector that Canadian art to-day possesses qualities vastly more enduring and original than does a very large proportion of the art that is imported from other countries.

The National Gallery of Canada.

The National Gallery of Canada was founded in 1880, by the Marquis of Lorne, Governor-General of Canada. The collections of pictures, statuary and other works of art, now occupying premises in the Royal Victoria Museum in Ottawa, consist of purchases made by means of the annual grants voted by the Dominion Parliament, the diploma works of the members of the Royal Canadian Academy, and gifts and loans by persons interested in art. In 1907 an Advisory Arts Council of three members was appointed by authority of an Order in Council, and in 1913, under the National Gallery of Canada Act (3-4 Geo. V, c. 33), the Advisory Arts Council was constituted a Board of Trustees for the management of the National Gallery and the administration of its annual grants.

In addition to the care and management of the National Gallery, the Act imposes upon the Board responsibility for “the encouragement and cultivation of correct artistic taste and Canadian public interest in the fine arts, the promotion of the interests generally of art in Canada.”

Amongst the collections of oil paintings now in the National Gallery are works by such old masters as Tintoretto, Caravaggio, Andrea del Sarto, Bartholomæus de Bruyn, Luca Giordano, Cima da Conegliano, Frans Floris, Chardin, Hogarth, Snyders, Daniel Mytens. Representative of the more modern schools are works by the great English masters—Reynolds, Hoppner, Beechey, Lawrence, Gainsborough, Millais, Leighton, Holman Hunt. The French masters include J. F. Millet, Edgar Degas, Claude Monet, Alfred Sisley and a number of others, while the contemporary British school is strongly represented by fine examples of the work of such artists as Arnesby Brown, Laura Knight, Glyn Philpot, W. Orpen, D. Muirhead, G. Henry, Austen Brown, Adrian Stokes and many others. The Gallery includes an excellent and representative exhibition of the work of Canadian artists, both past and present.

The National Gallery collections of engravings, etchings, lithographs, etc., have been developed and formed into a department of prints with a special curator at the head. Important acquisitions have recently been made of works by Mantegna, Robetta, Nicholetto, Rosex, D. Campagnola, Marcantonio, Canaletto; Master M.Z., Schongauer, Dürer, Altdorfer, Aldegrever, Pencz, Hirschvogel,

Hollar; Master W.C.I.E.F., van Dyck, van Leyden, Rembrandt, Ostade, Potter, van de Velde, Bega, Berchem, Ruysdael; Duvet, Gellee, Mellan, Morin, Nanteuil, Drevet, Jacque, Millet, Corot, Raffet, Isabey, Bonington, Meryon, Braquemond, Jacquemart, Legros, Lepere; Harding, Blake, Crome, Daniel, Wilkie, Geddes, Haden, Short, Strang, McBey, Brangwyn, Shannon, Gabain; Whistler, Zorn.

One of the most important activities of the National Gallery is its loan exhibition work. Under this policy the National Gallery lends to any art body or society in Canada, which possesses the necessary facilities, a collection of Canadian paintings, either for one year or for shorter periods. During 1923, twenty loans were distributed, and practically every important city in Canada has thereby gained a better knowledge of Canadian art. The aggregate value of loans made during the past five years is over \$1,000,000. The attendance during the year was over 100,000, and it is estimated that almost as many more viewed the various exhibitions held throughout the country.

Recent Acquisitions.—Among the specially noteworthy pictures acquired during the past year are two magnificent portraits of the 16th century, one Flemish and one Italian. The Flemish portrait is of Sir Thomas Gresham by Sir Anthony More, 1512-1576, while the Italian is a portrait of a Man in Black by Giambattista Moroni, 1520-1578. In addition to these, an important sculptured figure in stucco, "The Infant Jesus Blessing", by Desiderio da Settignano, 1428-1464, was also secured, as were important water-colour paintings and drawings by Turner, Rowlandson, Samuel Palmer and others. Among modern works recently added to the national collection are unusually fine examples of the work of such well-known men as William Strang, R.A., Augustus John, A.R.A., Charles Ricketts, A.R.A., Mrs. A. L. Swynnerton, A.R.A., Walter Russell, A.R.A., Cayley Robinson, A.R.A., and a number of others. In addition to the above, the Board of Trustees has continued to purchase consistently what it deems the best work of Canadian artists from the current exhibitions.

Outstanding acquisitions in the print department include "Christ on the Cross" by Martin Schongauer, "Cornelius Anslo" by Rembrandt, "Frederick of Saxony" by Albrecht Dürer and "Retour du port" by Eugene Isabey. Approximately two hundred prints were added to the collection during the year.

XI.—PUBLIC HEALTH AND BENEVOLENCE.

Greatly increased attention has been devoted during recent years to public health and related subjects in Canada, the work embracing, in addition to the supervision of the general health of the community, the maintenance of hospitals and institutions for the care of needy and indigent persons. In general, the administration of public health activities and the establishment and maintenance of such institutions is in the hands of the various Provincial Governments, under the powers given them in sec. 92 of the British North America Act, 1867. Under their control, municipal governments and various societies and individuals initiate and foster charitable and humane efforts, depending on the Government to some extent for financial aid and for competent, uniform inspection of methods and standards. Exercising particular jurisdiction over some phases of the general health of the people of the Dominion, is the Department of Health of the Dominion Government.

Public Health.—Considerable diversity in methods of administration of public health activities is encountered in the different provinces. Apart, however, from the actual organization of provincial Health Departments and of the administrative bodies charged with the management of hospitals and other such institutions, it will be observed, in the summaries of provincial activities which follow, that particular attention is given to the same branches of public health work in all the provinces. Perhaps the most important of all, and those which reflect most clearly the benefits accruing from such work, are the systems of medical inspection of school children. This is carried out in some cases by the district or sub-district medical health officers, and in others by public health nurses whose activities are confined to it alone. In addition to the continual supervision exercised over the health of the children, expert advice and assistance are supplied freely to children, teachers and parents. In many cases, dental inspection is provided for. While this work has been carried on on a considerable scale for but a few years, great benefits have already been realized from it, notably general improvement in health and sanitary conditions both in schools and homes, and in the control and prevention of epidemics.

In other directions also, governmental activities through Departments of Health have produced numerous evidences of their value, which may be illustrated by an examination of the death rates from various communicable and other diseases, such as are shown in the Population section of the present volume under the heading of "Vital Statistics." In Ontario the rate of deaths from tuberculosis decreased from 85.6 to 66.3 per 100,000 during the period 1913 to 1922, and that from typhoid fever from 19.4 to 5.9 per 100,000. While some other rates have increased, it may be noted that increases are not general in the case of communicable diseases and that, in respect to tuberculosis especially, the cities of the province show the lowest mortality rates. The reason for this is the fact that public health work is more advanced there than in the towns and rural areas, and its good effect in respect to this and other diseases is apparent. Public health work, indeed, has rendered the development and spread of epidemics of the more common diseases practically impossible.

Institutions.—The most familiar of all public institutions established to administer and foster the general health of the community and in which charitable effort is manifested is the general hospital, common to all cities and towns of any

considerable population, and found also in the more modern and prosperous rural districts. Such hospitals are generally erected and supported by the municipality, their actual administration being in the hands of a board of trustees, and their revenue, in addition to that provided by the municipality, being drawn, in the main, from grants from the Provincial Government, from donations from individuals and societies, and from patients' fees. Admission and treatment are free to all deserving persons who apply for it and whose resources are so limited as to prevent their otherwise receiving proper medical attention, while it is more or less generally expected of others that payments for services shall be made in proportion to costs and the ability of patients to defray them. Second in importance are the houses of refuge and orphanages, homes where destitute adults and homeless children are taken in, fed and clothed until they can support themselves or until homes for them are found elsewhere. Orphans' homes are found in practically every urban and rural community of any size, while refuges or homes for the aged are supported by the larger centres and by county municipalities. Asylums for the insane, also found in all the provinces, differ from the foregoing types in that they are in general owned, supported and administered entirely by the province. In Nova Scotia, however, the insane of separate counties are, in some instances, cared for in one institution, together with the inmates of the refuge and orphanage. In addition, other institutions supported by the public include isolation hospitals, maternity hospitals, homes for the deaf, dumb and blind, homes for incurables, infirmaries, homes for epileptics and for lepers, and tuberculosis sanatoria.

Throughout the Dominion many other more or less similar institutions exist, whose nature is more independent than that of the types mentioned above.¹ Since these institutions do not receive Provincial Government grants and hence are not in all cases subject to inspection, no complete record showing their number, purpose and the number of inmates can be obtained.

But little historical information on the subject is available. No statistics of public benevolence had been presented in the Canada Year Book for some years before their inclusion in the 1922-23 edition. It seems, however, that until comparatively recently, the caring for needy and destitute persons, as we now recognize it, was largely in the hands of individuals, of whose humane efforts scanty evidence remains for present use. The inability of private effort to cope with a problem of such rapidly increasing dimensions has led to the present Government control of the majority of such establishments.

In the exercise of the powers granted them at Confederation, the various Provincial Governments have enacted considerable legislation governing the regulation of public charities. In Ontario, for example, the Houses of Refuge Act, the Hospitals for the Insane Act, the Private Sanitarium Act, the Sanatoria for Consumptives Act, the Hospitals and Charitable Institutions Act, and the Prisons and Public Charities Inspection Act have been passed, dealing with different phases of the subject. Similar legislation by other Provincial Governments also provides for the maintenance of hospitals, the carrying-on of charitable work, the provision of funds and inspection by competent officials.

Numbers and Types of Hospitals and Charitable Institutions in Canada.

—An attempt has been made to bring together in tabular form certain statistics of the number of institutions in the Dominion concerned with the health of the community or carried on as result of benevolent effort. It is, of course, highly desirable

¹ For information regarding Dominion Government hospitals for returned soldiers, see sub-section ¶ Department of Soldiers' Civil Re-establishment," pp. 922-3.

that not only the mere data of numbers but also those relating to inmates, staff, finances, etc., should be similarly collated for the country as a whole. This, however, is for the present impossible owing to the incomparability, in some cases, of statistics published by the various provinces and in others to the scarcity or absence of published information. The matter made available, however, is given in as complete and concise form as possible under provincial headings below.

Table 1 is designed to show the numbers of institutions in Canada, by provinces, for the years 1922 or 1923.

1.—Number of Public Hospitals and Benevolent Institutions in Canada, 1922 or 1923.

Types.	P. E. Island. ¹	Nova Scotia. ²	New Brunswick. ²	Quebec. ²	Ontario. ²	Manitoba. ¹	Saskatchewan. ²	Alberta. ¹	British Columbia. ²
General Hospitals.....	1	16	14	54	101	—	39	—	64
Maternity ".....	—	1	2	4	4	—	37	—	29
Private ".....	—	—	—	—	53	—	—	—	—
Isolation ".....	—	—	—	—	—	—	27	—	—
Tuberculosis Sanatoria.....	—	2	2	5	11	—	1	—	1
Hospitals for the Insane.....	1	24 ³	1	6	12	3	2	2	3
Homes for Epileptics.....	—	—	—	4	—	—	—	—	—
Homes for Infirm.....	—	—	—	4	—	—	—	—	1
Homes for Incurables.....	—	—	—	4	4	1	1	—	1
Leper Stations.....	—	—	1	—	—	—	—	—	1
Orphanages.....	—	10	1	—	30	—	—	—	—
Houses of Refuge.....	—	22	2	122	75	—	—	—	—

¹ 1922. ² 1923. ³ Some refugees and orphanages are also maintained as hospitals for the insane.

⁴ Included with orphanages and refugees.

NOTE.—The latest available figures are given. The fiscal years of the various provinces are as follows: Prince Edward Island, Manitoba and Alberta, Jan. 1 to Dec. 31; Nova Scotia, Oct. 1 to Sept. 30; New Brunswick and Ontario, Nov. 1 to Oct. 31; Quebec, July 1 to June 30; Saskatchewan, May 1 to April 30; and British Columbia, April 1 to Mar. 31.

Hospitals for Mental Defectives.—It is only in the case of hospitals for mental defectives that comparable statistics of institutions throughout the nine provinces are available. Table 2 brings their more important data together and may be taken as giving a general idea of the situation throughout the Dominion.

2.—Statistics of Hospitals for Mentally Defective Persons in the Nine Provinces of Canada.

(For latest available years.)

Items.	P. E. Island. ¹	Nova Scotia. ²	New Brunswick. ³	Quebec. ⁴	Ontario. ⁵
Number of institutions.....	1	23	1	6	12
Inmates (beginning of year).....	295	681	654	6,026	7,967
Admissions.....	74	208	172	1,447	2,133
Discharges and deaths.....	60	118	154	1,410	1,735
Improved or cured.....	44	—	92	478	835
Inmates (end of year).....	309	710	667	6,063	8,365
Staff—Doctors.....	—	—	2	28	44
Nurses.....	—	—	—	1,017	1,358
Revenue—Government grants.....	\$ —	\$ 101,335	\$ 56,498	\$ 1,113,039	\$ —
Fees.....	\$ —	\$ 184,650	\$ 2,320	\$ 278,147	\$ 400,678
Total.....	\$ —	\$ 295,276	\$ 87,770	\$ 1,514,516	\$ 460,355
Expenditure—Salaries.....	\$ —	\$ 90,594	\$ 45,661	\$ 342,422	\$ 1,142,534
Buildings and equipment.....	\$ —	\$ —	\$ 19,591	\$ 386,073	\$ 361,445
Total.....	\$ —	\$ 295,276	\$ 179,808	\$ 1,521,384	\$ 2,415,635

¹ For the year ending Dec. 31, 1922.

² For the year ending Sept. 30, 1923. The number of institutions is that of homes and asylums for the poor and insane. Figures of revenue and expenditure apply to one hospital only.

³ For the year ending Oct. 31, 1923.

⁴ For the year ending Dec. 31, 1923.

⁵ For the year ending Oct. 31, 1922. The number of institutions includes one under governmental inspection only. Remaining figures are for 11 institutions.

2.—Statistics of Hospitals for Mentally Defective Persons in the Nine Provinces of Canada—concluded.

Items.	Man- itoba. ¹	Saskat- chewan. ²	Alberta. ³	British Colum- bia. ⁴
Number of institutions.....	3	2	2	3
Inmates (beginning of year).....	1,291	1,170	821	1,787
Admissions.....	211	529	265	447
Discharges and deaths.....	159	405	154	450
Improved or cured.....	—	—	129	—
Inmates (end of year).....	1,343	1,294	862	1,784
Staff—Doctors.....	—	—	—	8
Nurses.....	268	122	—	27
Revenue—Government grants.....	\$ —	—	19,860	—
Fees.....	\$ 52,038	93,039	—	82,396
Total.....	\$ 90,322	117,727	19,860	82,396
Expenditure—Salaries.....	\$ 196,347	205,339	8,800	238,420
Buildings and equipment.....	\$ —	73,332	—	132,167
Total.....	\$ 274,804	699,759	18,954	585,112

¹ Year ending (10 months) Aug. 31, 1922.

² Year ending April 30, 1923.

³ Year ending Dec. 31, 1922. One institution for the care of mentally defective children is included.

Figures of revenue and expenditure apply to this institution only.

⁴ Year ending Mar. 31, 1924.

I.—DOMINION DEPARTMENT OF HEALTH.

The activities of the Dominion Department of Health for the fiscal year 1924 may be classified under the following eleven headings:—Quarantine Service, including Leper Stations, Immigration Medical Service, Marine Hospitals Service, Venereal Disease Control, Housing, with Hospitalization and Sanitation, Opium and Narcotic Drugs, Proprietary or Patent Medicines, Child Welfare, Food and Drug Laboratories, Public Works Health Act and Finance.

Quarantine Service.—Organized quarantine stations were operated at Charlottetown, P.E.I., Chatham, N.B., Halifax, N.S., Louisbourg, N.S., North Sydney, N.S., Quebec, Que., St. John, N.B., and Victoria, B.C. The total number of vessels reporting at the above stations was 2,134, and of examinations of individuals 428,498. A total of 758 persons was distributed to quarantine hospitals and detention buildings. Of these, 189 were actually sick; the remainder, of whom 267 were detained as possible smallpox contacts, was made up of contacts and persons accompanying the sick. Diseases treated in the quarantine hospitals numbered 32; 57 of the total number of cases were of measles, 29 of chicken pox, 16 of acute cold, 11 of smallpox and 10 of tonsillitis, the remaining diseases occurring in 9 or fewer cases.

The service has under its supervision two leper stations, one at Tracadie, N.B., and the other at Bentinck island, B.C. Ten patients were under treatment at the Tracadie lazaretto, six males and four females. One patient died during the year. Seven patients were cared for during the year at the Bentinck Island lazaretto, an increase of two over the previous year.

Immigration Medical Service.—For the purpose of detecting physical or mental defects in immigrants, as provided by the Immigration Act, 138,241 immigrant passengers were examined; of this number, 1,380 were found to be of the prohibited classes (mental defectives, those afflicted with loathsome or contagious disease and physically defective persons), while in addition, 283 other passengers (immigrant and non-immigrant) were detained for medical or surgical treatment

previous to certification. An additional number of 1,270 were detained for closer examination on account of suspected mental or physical defects.

Marine Hospitals Service.—The Department operates two marine hospitals, at Sydney and Lunenburg, N.S., revenues for the purpose being collected on the tonnage of vessels arriving at ports in the Maritime Provinces, Quebec and British Columbia. Gratuitous treatment is accorded all needy mariners from vessels paying such dues. In addition to the two hospitals maintained by the Government, treatment was provided during the year at 58 town and city hospitals in the five provinces to 2,745 injured and distressed mariners.

Venereal Disease Control.—The annual grant by the Dominion Government to aid in the prevention of the spread of venereal diseases was continued and allotted to the various provinces. The campaign carried on throughout the country by the various governments may be divided roughly into five main activities,—treatment, education, social service, law enforcement and the collection of statistics. There are 56 clinics in operation throughout the Dominion, at which free treatment may be obtained, while free hospital accommodation is given where necessary. Both the Dominion and the Provincial Governments have issued pamphlets and circulars designed to prevent the spread of the diseases.

Housing, Hospitalization and Sanitation.—Under the Dominion Housing Act, an amount of \$4,000,000 was voted by the Dominion Parliament for the year. Of this sum, \$3,174,783 was lent to the seven provinces included in the scheme, to which total loans up to March 31, 1924, amounted to \$23,508,190. The total number of houses erected was 6,244. Municipalities to the number of 179 are operating under the Act.

Opium and Narcotic Drugs.—During the year, the Department issued 191 import licenses, 51 export licenses, 107 wholesale druggists' licenses and 57 licenses to retail manufacturing druggists. Narcotics imported into Canada were as follows: cocaine 1,561 oz., morphine 7,092 oz. and crude opium 845 lb.

Close supervision is maintained on all exports and imports of narcotics, and the licensing system enables the Department to know at all times the amount of these drugs received by every druggist, veterinary surgeon, dentist or physician in Canada. By this system it is possible for the Department to check up the disposition of these drugs, and to make absolutely certain that the use being made of them does not contravene the Act. Statistics of offences against the Opium and Narcotic Drug Act for the year ended Sept. 30, 1923, show a total of 1,102 convictions. Prosecutions under the same Act by the Royal Canadian Mounted Police during the year ended March 31, 1924, totalled 303.

Proprietary or Patent Medicines.—Medicines registered and licensed under the Proprietary or Patent Medicine Act during the year 1923-24 numbered 5,528, including 660 new medicines. Under the operation of the Act, which has as its fundamental principle the requirement that all such articles shall be on the market in a way which permits the ordinary layman to understand what he is buying, many articles were rejected as absolute frauds and dangerous to health. Periodically samples of various medicines are obtained in the open market and are sent to the laboratory, for the purpose of confirming and approving the ingredients of each.

Child Welfare.—General co-operation in matters relating to child and maternal welfare has been continued or established with the various Departments of the Dominion Government, Provincial Governments and voluntary societies throughout the country. The publications of the branch have been revised and republished.

Food and Drugs Division.—A total of 6,274 samples of foods and drugs were examined during the year in the laboratories of the Department at Ottawa, Halifax, Montreal, Winnipeg and Vancouver to determine their purity or degree of adulteration. Numerous prosecutions were made under the provisions of the Food and Drugs Act, the Maple Products Act and the Proprietary or Patent Medicines Act, where goods not conforming with the law had been offered for sale.

Public Works Health Act.—The activities of the Department under the Public Works Health Act have included the maintenance of a hospital, a first-aid office and an ambulance service along the new Welland canal, now under construction between lake Ontario and lake Erie. A total of 897 visits were made by the medical officer, 3,413 cases were treated as hospital out-patients, 122 were given hospital treatment, while a total of 2,449 hospital days were afforded to patients. At Courtenay Bay, N.B., supervision of the health of some 650 employees on a new dry-dock was maintained by the Department. In Western Canada, workmen on numerous railway construction contracts were afforded medical care and hospital treatment when necessary.

Financial Statements.—A net expenditure for the year of \$896,961 is recorded, in which the largest items are: Quarantine, \$190,197; Venereal Diseases, \$186,460; Salaries, \$140,601; Marine Hospitals, \$109,793 and Administration of Food and Drugs Act, \$75,522. Net revenues amounted to \$207,611, of which sick mariners' dues totalled \$172,319.

II.—OTHER PUBLIC HEALTH ACTIVITIES.

1.—Prince Edward Island.

In the report of the trustees of the Falconwood Hospital and Provincial Infirmary for the year ended December 31, 1923, a total of 315 patients were shown as resident on this date, compared with a total of 309 at the beginning of the year. During the year, 72 patients had been admitted, while discharges and deaths totalled 66. Expenditure for maintenance and repair of the institutions amounted to \$128,481, while revenues from fees and other sources were \$9,168.

2.—Nova Scotia.

The 31st annual report of the Department of Public Health of the province deals mainly with the collection of vital statistics and with disease control, effected both by means of campaigns against the more dangerous types and by the regular supervision of the health of school children.

In an attempt to control the number of deaths from cancer in the province, (the rate having increased from 72 per 100,000 population in 1908 to 93 in 1921) an educational campaign was carried on during "cancer week". In the distribution of insulin as a cure for diabetes, the provincial authorities have assisted in arranging for the supplying of practitioners and hospitals, a similar move having also been made with regard to the treatment of cases of venereal diseases, whereby not only the facilities of provincial clinics but also those of local hospitals have been made available.

Anti-tuberculosis work has resulted in a steady decline in the death rate from 1909 to 1922 of approximately 40 p.c., and, with the introduction of the Spallinger and Dreyer systems of treatment, it is hoped this will show further improvement.

The work of public health nurses in connection with the examination of children attending school is perhaps best evidenced by the number of such examinations made—27,199 in the various counties, and 16,698 in seven cities and towns, a total of 43,897. The total number of children found to have defects, many of which are minor, was 25,121.

The latest available statistics of hospitals and benevolent institutions in Nova Scotia, as contained in the Report of the Inspector of Humane Institutions for the year ended Sept. 30, 1923, are given in tabular form in Table 3. It should be stated that while in Table 1 of this section, the province is shown to maintain 24 mental hospitals and 22 houses of refuge, the statistics given below are solely those of the institutions coming under the inspection of the Provincial Government. The same applies to tuberculosis sanatoria, of which only one is inspected by provincial officials.

3.—Hospitals, etc., in Nova Scotia, 1923.

Items.	General, Isolation, and Private Hospitals.	Maternity Hospitals.	Sanatoria for Consumptives.	Hospitals and Asylums for the Insane and Poor.
Number of institutions.....	16	1	1	24
Number of patients (beginning of year).....	624	39	93	2,015
Admissions and births.....	9,409	482	227	826
Discharges, etc.....	9,930	872	213	822
Number of patients (end of year).....	568	29	107	2,019
Receipts—Government grants.....	\$ 75,731	—	97,231	—
Fees.....	\$ 217,585	—	157,877	—
Total.....	\$ 463,028 ¹	—	263,582	—
Expenditures—Salaries.....	\$ 124,427	—	88,440	—
Buildings and equipment.....	\$ 63,728	—	84,451	—
Total.....	\$ 453,273 ¹	—	263,582	—

¹ For 14 hospitals only.

3.—New Brunswick.

The New Brunswick Department of Health includes among its branches those of general sanitation, water supply, drainage and communicable disease, medical school inspection, sanitary education and publicity, a provincial pathological and public health laboratory and the general supervision of the health sub-districts, of which there are sixteen.

The Department is administered by the Minister of Health, from a governmental standpoint, and is under the immediate and direct control of the Chief Medical Officer. His staff, which, with the Minister, forms the Bureau of Health, consists of the chief of laboratories, three district medical health officers, six medical school inspectors, a director of nurses and director of venereal clinics.

The Chief Medical Officer of the province, in his sixth annual report, summarizes the chief activities of the department during the year ended Oct. 31, 1923, under the headings of general sanitation, medical school inspection and the collection of vital statistics.

Under the system of medical school inspection, the province is divided into 6 areas, each of which is again divided into sub-districts. A medical inspector is in charge of each district and the attempt has been made, although not altogether successfully, to examine the physical and mental condition of every child attending school throughout the province at some time during the school year. As a result,

44,247 out of 53,709 pupils were examined during the year ended June 30, 1923, and of this number 11,625 were found to be normal, the remainder having some defect of mind or body. Dental defects were the most noticeable in number, totalling 17,657, while cases of enlarged glands, defective hearing and eye defects were also numerous.

Several improvements were made during the year by cities and towns with regard to their water supply, drainage and milk supply.

Statistics of hospitals, sanatoria and orphanages and refuges are presented in Table 4.

4.—Hospitals, etc., in New Brunswick, 1923.

Items.	General, Maternity, Isolation, and Private Hospitals.	Sanatoria for Consumptives.	Hospitals for the Insane.	Orphanages, Refuges, etc.
Number of institutions.....	16	2	1	3
Number of patients (beginning of year).....	427	167	654	183
Admissions and births.....	10,422	312	172	114
Discharges, etc.....	10,367	302	96	105
Number of patients (end of year).....	482	177	730	192
Staff—Doctors.....	371	5	3	7
Nurses.....	289	24	21	29
Receipts—Government grants.....\$	142,336	66,270	149,936	16,081
Fees, etc.....\$	277,735	63,651	28,777	6,920
Total.....\$	455,551	129,920	179,808	46,690
Expenditure—Salaries, etc.....\$	256,703	93,971	45,661	11,925
Buildings and equipment.....\$	441,776	71,163	134,147	5,971
Total.....\$	745,981	165,134	179,808	53,192

4.—Quebec.

In the administration of the health of the province, the Provincial Bureau of Health, in charge of the Provincial Secretary, with its activities divided among the twenty public health districts, sees to the carrying out of the provisions of the Public Health Act. Twenty inspectors are appointed for the twenty districts, their duties being divided generally between education of the public and municipal public health organization, while, in addition, their services are given in case of consultations, public lectures, maintenance of records of municipalities and medical and sanitary investigations. In addition to the district officers, the Bureau maintains an administrative division, a laboratory division, a division of sanitary engineering, a division of venereal diseases and a division of vital statistics. The energies of the Bureau are being directed mainly toward the prevention, by organized campaigns, of epidemics, more particularly tuberculosis and the more important causes of infant deaths.

Below are given the latest statistics of benevolent institutions in the province, compiled from the exhaustive report published by the Quebec Bureau of Statistics. In brief explanation of the table, it may be said that the 58 general hospitals include 4 maternities and 2 crèches. In addition, 23 dispensaries are maintained, where the principal services are those of medicine, surgery and ophthalmology. The number of days passed in these institutions by patients during 1923 was 979,644; the accommodation available was 4,218 beds; and the average cost per patient per day varied from \$0.43 to \$4.89.

The refuges and orphanages provide accommodation of 13,672 beds. During the year 1923, the total number of days passed in these institutions by needy persons was 4,454,925. In addition, 66,215 indigents were given help during the year.

5.—Hospitals and Philanthropic Institutions in Quebec, 1923.

Items.	General, Maternity, Isolation and Private Hospitals.	Sanatoria for Con- sumptives.	Hospitals for the Insane.	Homes, Orphanages and Refuges.
Number of institutions.....	58	5	6	122
Number of patients (beginning of year).....	2,972	219	6,026	12,027
Admissions.....	48,135	295	1,447	5,981
Discharges, deaths, etc.....	48,297	338	1,410	5,790
Number of patients (end of year).....	2,810	176	6,063	12,218
Staff—Doctors.....	373	136	28	3,506
Nurses.....	2,883		1,017	
Receipts—Government grants ¹	\$ 561,491	184,392	1,113,039	391,927
Fees, etc.....	\$ 1,419,579	44,173	278,147	—
Total.....	\$ 3,703,079	399,334	1,514,516	3,272,523
Expenditure—Salaries, etc.....	\$ 667,052	39,302	342,422	452,343
Buildings and equipment.....	\$ 902,176	148,749	386,073	878,783
Total.....	\$ 3,703,079	358,413	1,521,384	3,291,733

¹ Provincial and municipal governments.

5.—Ontario.

A Provincial Department of Health, responsible to the Minister of Health and comprising divisions in charge of laboratories, industrial hygiene, public health education, preventable diseases, sanitary engineering and maternal and child welfare, oversees the administration of the Public Health Act throughout the province. Through its division into eight districts, each of which is in charge of a district officer of health, close touch is maintained between the Department and the municipalities through the province. This contact, of course, is strengthened by the relations between municipally-appointed health officers and the officials appointed by the Provincial Government.

The principal statistics of hospitals and similar institutions in Ontario are found in the Report of the Hospitals and Charitable Institutions, containing data relative to government-aided hospitals, orphan asylums and county houses of refuge, and in the Report upon the Hospitals for the Insane, Feeble-minded and Epileptic, relating to the provincially-operated institutions for the care of mental defectives.

The number of general and maternity hospitals given in Table 6 is exclusive of 53 private hospitals which are not required to make detailed returns to the inspector of prisons and public charities. The number of refuges and orphanages, 105 in all, is made up of 41 refuges in cities and towns, 30 orphanages, 3 convalescent homes and 31 county houses of refuge. The total number of days' stay in hospitals during the year ended Sept. 30, 1923, was 2,526,132, at an average cost per patient per day of \$3.19.

Money grants to hospitals in the province coming under the supervision of the Department of the Provincial Secretary are made as follows:

1. A grant is made for all patients in a hospital during the first ten years of its existence at the rate of 50c. per day, irrespective of what sum is contributed by the patients themselves.

2. After a hospital has been in existence for ten years, the grant is paid only for patients for whose maintenance \$10.50 per week or less is contributed.

3. In all cases the limit is 120 days, and if the patients remain in the hospital longer than that period, the refuge rate of 10c. per day is allowed.

4. No allowance is made for infants born in hospital.

Very similar grants, including an initial lump sum, are made to sanatoria for consumptives.

6.—Hospitals in Ontario, year ended Sept. 30, 1923.

Items.	General, Maternity, and Isolation Hospitals.	Sanatoria for Consumptives.	Hospitals for the Insane. ¹	Orphanages, Refuges, etc.
Number of institutions.....	109	11	12	105
Number of patients (beginning of year).....	5,674	1,233	7,967	6,998
Admissions, births, etc.....	130,899	1,913	2,133	5,317
Total treatments.....	136,573	3,146	10,099	12,315
Discharges, etc.....	130,798	1,901	1,735	5,406
Number of patients (end of year).....	5,775	1,245	8,365	6,909
Staff—Doctors.....	—	—	44	—
Nurses, etc.....	—	—	1,358	—
Receipts—Government grants.....\$	1,878,113	730,457	—	213,852
Fees, etc.....\$	4,177,519	158,818	400,678	—
Total.....\$	6,837,899	1,218,746	460,355	—
Expenditure—Salaries, etc.....\$	—	—	1,142,534	—
Buildings and equipment.....\$	—	—	361,445	—
Total.....\$	6,862,547	1,229,256	2,415,635	1,754,074

¹ Year ended Oct. 31, 1922.

6.—Manitoba.

The various divisions of the Provincial Board of Health comprise those of public health nursing, food inspection, venereal disease prevention, the recording and prevention of communicable diseases and vital statistics. Under the superintendent of provincial public health nurses, a large amount of work is carried on in the direction of education, medical school inspection, child welfare, public service nursing, and the distribution of literature. The work of other divisions is more or less of a routine nature.

The principal regulations made by the Board, in its administration of the Public Health Act, have relation to: (1) the occupation of portions of buildings contained below street level, (2) the use of common towels in public places, (3) the use of common drinking cups, (4) barber shops and hair-dressing parlours, (5) the use of hydrocyanic acid, (6) the sterilization of wiping rags, etc., and the sale thereof, (7) the notification of infectious and contagious diseases, (8) the prevention of venereal diseases and the establishment of dispensaries for the treatment thereof, (9) slaughter houses, (10) bottling plants, (11) places where food is sold on the premises.

No more recent information than that published on pp. 921-922 of the 1922-23 Year Book is available regarding the activities of hospitals and charitable institutions.

7.—Saskatchewan.

On March 22, 1923, by an Act to amend the Public Health Act, the Bureau of Public Health was made a Department of Public Health, with a Minister and Deputy Minister in charge.

The following Acts are administered by the Department: Public Health Act; Vital Statistics Act; Union Hospital Act; An Act to Regulate the Public Aid to Hospitals; Venereal Disease Act.

Six divisions, with a director in charge of each, carry out the work of the Department, as follows: the division of child welfare and hospital management supervises the making of maternity grants, baby clinics, home nursing, relief and hospital management; the division of communicable diseases deals with the control of these diseases and distributes sera and vaccines; the division of sanitation supervises food, water, milk and ice supplies, sewage systems, urban and rural sanitation and union hospital organization; the division of laboratories includes in its work bacteriology, pathology, chemical analyses and medico-legal work; the division of vital statistics compiles records of births, marriages and deaths, etc.; the division of venereal diseases supervises the dispensaries, free examination and treatment.

In addition to the hospitals which Saskatchewan has in common with the other provinces, mention may be made of a system known as the union hospital scheme, designed to furnish necessary hospital accommodation in rural districts. Under the provisions of the scheme, two or more municipalities may co-operate in arranging to build, equip and maintain a hospital in their district and for their residents. These smaller hospitals are not intended, of course, to furnish extensive accommodation, but they do furnish splendid accommodation for emergency or maternity cases.

7.—Hospitals, etc., in Saskatchewan, year ended April 30, 1923.

Items.	General, Maternity, Isolation and Private Hospitals.	Sanatoria for Consumptives.	Hospitals for the Insane.	Homes, Orphanages and Refuges.
Number of institutions.....	103	1	2	1
Number of patients (beginning of year).....	1,118	249	1,170	—
Admissions.....	29,144	155	529	—
Discharges.....	29,083	163	405	—
Total treatments.....	30,262	404	—	—
Number of patients (end of year).....	1,179	241	1,294	—
Staff—Doctors.....	—	—	—	—
Nurses, etc.....	—	115	122	—
Receipts—Government grants.....	\$ 218,534	\$ 45,005	—	—
Fees, etc.....	\$ 1,243,509	\$ 230,658	\$ 93,039	—
Total.....	\$ 1,462,043	\$ 275,663	\$ 117,727	—
Expenditure—Salaries, etc.....	\$ 452,487	\$ 107,827	\$ 205,339	—
Buildings and equipment.....	—	—	\$ 73,332	—
Total.....	\$ 1,445,433	\$ 276,517	\$ 699,757	—

8.—Alberta.

Public health affairs in the province of Alberta are controlled by the Department of Public Health and are under the direct administration of the Provincial Board of Health. The principal activities of this body comprise the supervision of: (1) diagnostic laboratories and distribution of biological products; (2) sanitary engineering; (3) maternal and child hygiene and public health nursing; (4) municipal hospitals; (5) preventable diseases; (6) vital statistics; (7) mental hospitals and institutions for the feeble-minded.

Comprehensive statistics of hospitals in Alberta are unfortunately available only in the case of hospitals for the insane. The annual report of the Department of Public Health of the province contains a statement by the superintendent of the provincial mental hospital, in which the number of mental defectives under treatment is shown to have increased during the year 1922 from 821 to 862; total revenues were \$19,860 and expenses \$18,954 (see Table 2).

Of other institutions, it may be said that in 1920 there were but 8 hospitals in operation under the municipal hospitals system, with a total of 160 beds. This number had increased to 15 hospitals, with 277 beds, at Dec. 31, 1923.

The Public Accounts of Alberta for the year ended Dec. 31, 1923, show grants by the Provincial Government to hospitals and sanatoria totalling \$267,030. Grants to orphanages for the same period amounted to \$2,500, while the total expenditure of the Department of Health on various accounts was \$854,928.

9.—British Columbia.

The Provincial Board of Health of British Columbia, a branch of the Department of the Provincial Secretary, is organized in five main departments: (1) sanitary, including the inspection of logging camps, tourist camps and ships; (2) venereal disease prevention; (3) public health nursing, comprising the conduct of baby clinics, medical school inspection and other social service activities; (4) laboratory, including the distribution of vaccines and antitoxins, besides the ordinary analysis of specimens; and (5) child hygiene. A report on the vital statistics of the province is included in the annual report of the board.

Table 8 contains a summary of the more important hospital statistics of the years ended Mar. 31, 1923, for general and related hospitals and sanatoria, and 1924 for hospitals for the insane. No data are available at present with respect to refuges and orphanages. The three mental hospitals showed a total average population during the year of 1,732, maintained at a net per capita yearly cost of \$290.19, or a daily cost of \$0.79. In contrast with records of hospitals for the insane in other provinces, showing a very equal distribution of inmates between the two sexes, these institutions in British Columbia showed, on Mar. 31, 1924, a population of 1,258 males and 526 females. This proportion is noticeably greater than that existing between the sexes in the total population of the province.

8.—Hospitals, etc., in British Columbia, Mar. 31, 1923.

Items.	General and Maternity Hospitals.	Sanatoria for Consumptives.	Hospitals for the Insane. ¹	Homes, Orphanages and Refuges.
Number of institutions.....	64	1	3	—
Number of patients (beginning of year).....	1,708	193	1,787	—
Admissions.....	33,974	179	447	—
Discharges.....	33,877	149	450	—
Total days' treatment.....	651,768	70,978	—	—
Number of patients (end of year).....	1,622	223	1,784	—
Staff—Doctors.....	—	7	8	—
Nurses, etc.....	559	11	27	—
Receipts—Government grants.....\$	380,389	134,118	—	—
Fees, etc.....\$	817,580	145,702	82,396	—
Total.....\$	2,035,786	284,019	82,396	—
Expenditure—Salaries.....\$	866,825	53,773	238,420	—
Buildings and equipment.....\$	356,292	84,150	132,167	—
Total.....\$	2,001,577	284,019	585,112	—

10.—The Canadian Red Cross Society.

A brief description of the organization and activities of the Red Cross Society in Canada appeared on page 923 of the Canada Year Book, 1922-23.

11.—The Victorian Order of Nurses.

The activities of the Victorian Order of Nurses since its inception in 1897 are summarized in the Canada Year Book, 1922-23, page 923.

12.—Mothers' Allowances.

Five of the nine provinces of Canada provide for the payment of allowances to mothers who are widowed or without adequate means of support. The province of Manitoba was the first to take up the work in 1916, and the example has been followed by the other western provinces and by Ontario.

It is a general stipulation under the existing Mothers' Allowances Acts that the mother be a resident of the province at the time of making application, that she be a British subject, generally with two or more children under fourteen years of age or with an insane or totally incapacitated husband and a similar number of children. Other similar requirements regarding residence and means of support are made, for it is not desired that applicants "be considered as applying for charity; but that the mother be regarded as an employee of the State, receiving remuneration for services rendered in the proper care of her children. The mother, as an employee of the Government, must not only satisfy them of her fitness to receive an allowance, but also that she is fulfilling the trust which is being placed in her."

In most cases the allowance is provided jointly by the Provincial Government and the local government of the municipality in which the applicant is resident, but in some cases—those of mothers resident outside of cities, towns and counties—the whole allowance is paid by the Provincial Government. Larger allowances are, at times, made in cities than in towns and county municipalities, and the basic rate is generally that paid to a mother with two dependent children. Administration of the Acts is as a rule in the hands of a commission or superintendent, and is closely allied with other work designed to ameliorate the conditions to which certain sections of the community are subjected. In Ontario and Manitoba, for example, the Acts are administered by commissions. In the former, the appointment of local boards, in cities, counties and districts, whose duty it is to pass on applications before their presentation to the central body, is provided for. Through this medium also, intimate contact is maintained with beneficiaries. In Saskatchewan and Alberta, the Acts are administered by the bureau of child protection and the superintendent of dependent and neglected children respectively, the organization in Alberta providing, in addition, for the appointment of inspectors in each municipality of the province. The Workmen's Compensation Board of British Columbia, assisted by a number of local advisory boards, superintends the administration of the Act in that province.

The following table shows, for the five provinces in question, the numbers of mothers and children to whom allowances have been paid, together with the latest annual and the total expenditures

9.—Mothers' Allowances in Canada, 1924.

Items.	Ontario. ¹	Manitoba. ²	Saskatchewan. ³	Alberta. ⁴	British Columbia. ⁵
Number of Mothers.....	4,058	670	902	594	1,014
Number of Children.....	12,373	2,302	3,322	1,887	2,636
Latest yearly Expenditure\$	1,707,894	406,771	234,750	242,686	437,572
Total Expenditure.....\$	5,477,400	—	882,675	888,211	1,659,344

¹ As on Oct. 31, 1924. ² Aug. 31, 1924. ³ Fiscal year ended Dec. 31, 1924. ⁴ Year ended Dec. 31, 1923. ⁵ Fiscal year ended Mar. 31, 1924.

The Mothers' Allowances Commission of Ontario, in a classification of beneficiaries under the provincial Act, shows 43 families with one child and an incapacitated husband in receipt of benefits during the year ended Oct. 31, 1924. There were, in addition, 1,708 families of 2 children under 16 years of age; 1,136 with 3; 660 with 4; 311 with 5; 117 with 6; 63 with 7; 14 with 8; 5 with 9 and 1 with 11 children, the average being slightly over 3 children per family. Death of the father was the cause of dependency in 3,338 cases, incapacitation of father in 475 cases, desertion in 138 cases and death of both parents in 107 cases.

Rates of Allowances.—Rates of allowances paid in Ontario are as follows: in cities \$40, \$45, \$50 and \$55 per month for mothers with 2, 3, 4, and 5 children; in towns the rate is \$5 lower, while the rate to beneficiaries in villages and rural areas is further reduced by \$5. In families where there are more than five children, the Commission may grant a further allowance not to exceed \$5 a month for each child over the number of five. In Manitoba, Saskatchewan and Alberta, no set rate of allowances is paid, the aim of payments being as far as possible to make up the difference between the income and the ordinary expenditure of a family. In Saskatchewan, minimum and maximum monthly payments of \$15 and \$30 are established. Payments in British Columbia are also not standardized, but regulations provide for a maximum monthly allowance of \$42.50 for a dependent mother with one child, and an additional \$7.50 for each other child under 16 years of age. A deduction of \$10 is made in case of the beneficiary owning her own home or holding it free from rent, while a maximum of \$15 per month is paid to a mother and one child where board and lodging are obtained free of charge.

XII.—ADMINISTRATION.

This Administration section includes sub-sections on most of the important governmental activities which are not covered in the preceding sections. Commencing with a sub-section on the public lands of Canada, it continues with a treatment of public defence and a survey of the activities of the Dominion Department of Public Works. Next comes an article on the Indians of Canada and their relations with the Department of Indian Affairs; to this, statistical tables of Indian population, etc., are appended. The establishment and operation of the Department of Soldiers' Civil Re-establishment, including the Board of Pension Commissioners, is described in the following sub-section. The final sub-section, Miscellaneous Administration, includes several articles dealing with the Soldier Settlement Board, the Department of the Secretary of State (including tables of naturalizations in Canada from 1916 to 1922, and of companies incorporated since 1900), the Royal Canadian Mounted Police, judicial and penitentiary statistics and divorce in Canada, illustrated by statistics of the years from 1901 to 1924. It closes with a treatment of the civil service of Canada, with statistical tables of employees and salaries.

I.—PUBLIC LANDS.

1.—Dominion Public Lands.

The Crown lands of the Dominion of Canada are situated (a) in the Prairie Provinces (Manitoba, Saskatchewan and Alberta), (b) in the belt of twenty miles on either side of the main line of the Canadian Pacific Railway, known as the Dominion Railway Belt of British Columbia, and (c) in a block in northern British Columbia, containing 3,500,000 acres, known as the "Peace River block." Every person who is the sole head of a family and every male who has attained the age of eighteen years and is a British subject, or declares his intention to become a British subject, is entitled to apply for entry for a homestead. The lands are laid out in townships of 36 sections. Each section contains 640 acres and is divided into quarter-sections of 160 acres. A quarter-section of 160 acres may be obtained as a homestead on payment of an entry fee of \$10 and fulfilment of certain conditions of residence and cultivation. To qualify for the issue of the patent, a settler must have resided upon his homestead for at least six months in each of three years, must have erected a habitable house thereon, and must have at least 30 acres of his holding broken, of which 20 acres must be cropped. A reasonable proportion of the cultivation should be performed in each of three years. A reduction may be made in the area of breaking where the land is difficult to cultivate on account of scrub or stone. Provision is made on certain conditions for residence in the vicinity, in which case the area of cultivation must be increased.

Lands in Saskatchewan and Alberta, south of township 16, are not open for homestead entry, but may be secured under grazing lease.

Disposal of Dominion Lands in Manitoba, Saskatchewan and Alberta.

—According to figures supplied by the Department of the Interior, a total of 127,575,882 acres, equal to 5,537 townships or 199,337 square miles, has been disposed of. The total number of acres within the surveyed area at Jan. 1, 1924, was 200,644,093, of which 27,015,300 were available for homestead entry. Table 1 shows the distribution of the surveyed area for each of the three Prairie Provinces as at Jan. 1,

1924. In addition to the surveyed area, there are large tracts of land in the northern part of these provinces, which have as yet been only very little explored. The total area of this unsurveyed tract is 284,998,787 acres, of which 22,390,540 acres are water-covered.

Maps showing the disposition of Dominion lands and lands available for entry, and reports on the resources and development of Manitoba, Saskatchewan and Alberta, have been issued by the Natural Resources Intelligence Service of the Department of the Interior, some of which are as follows: Land Maps of Manitoba, Saskatchewan, Southern and Northern Alberta respectively; small Land Map of the Prairie Provinces; Cereal Map of Alberta; Manitoba, its Development and Opportunities; Agricultural Loans; the Peace River District of Alberta; Description of the Resources and Possibilities of the Province of Saskatchewan, etc. Similar reports have been issued with regard to other parts of Canada such as: Natural Resources of Nova Scotia, Natural Resources of Quebec, the Province of New Brunswick, and Central British Columbia. With the object of assisting in the settlement and development of the idle lands in Canada, this service also publishes lists of unoccupied lands in the Prairie and Maritime Provinces, giving a short description of the properties, the prices and terms of sale or lease and the owners' names and addresses, thus giving prospective landseekers an opportunity of selecting lands suitable to their means and requirements, and affording them an easy means of getting in direct touch with the owners thereof.

1.—Disposition of the Surveyed Areas in Manitoba, Saskatchewan and Alberta, Jan. 1, 1924.

Items.	Manitoba.	Saskatchewan.	Alberta.	Total.
	acres.	acres.	acres.	acres.
Area under Homestead (including Military Homesteads).....	8,235,690	27,657,400	18,217,200	54,110,290
Area under Pre-emption, Purchased Homesteads, Sales, Half-breed Scrip, Bounty Grants, Special Grants, etc.....	5,109,100	7,533,100	3,821,300	16,463,500
Area granted to Railway Companies.....	3,566,997	15,177,063	13,120,014	31,864,074
Area granted to Hudson's Bay Co.....	1,206,400	3,184,000	2,177,800	6,568,200
Area of School Land Endowment (1-18 of area surveyed in sections).....	1,637,700	3,943,500	3,756,000	9,337,200
Area sold subject to reclamation by drainage.....	—	23,188	34,837	58,025
Area sold under Irrigation system.....	—	76,832	981,877	1,058,709
Area under Timber Berths.....	961,900	675,800	1,347,200	2,984,900
Area under Grazing Leases.....	95,371	2,929,037	2,870,957	5,895,365
Area of Forest Reserves and Parks.....	2,901,939	5,925,980	16,807,347	25,635,266
Area reserved for Forestry Purposes (inside surveyed tract).....	323,100	1,074,300	1,677,500	3,074,900
Area of Road Allowances.....	977,132	1,468,330	1,287,406	3,732,868
Area of Parish and River Lots.....	505,361	84,015	118,565	707,941
Area of Indian Reserves.....	433,957	1,071,061	1,368,337	2,873,355
Area of Indian Reserves surrendered.....	88,695	410,440	302,675	801,810
Area of Water-covered lands (inside surveyed tract).....	4,263,590	1,904,820	2,297,160	8,465,570
Area undisposed of.....	5,511,500	5,917,800	15,586,000	27,015,300
Total area within surveyed tract.....	35,815,252	79,056,666	85,772,175	200,644,093

Homestead Entries.—In the calendar year 1923 the total number of homestead entries was 3,754. Table 2 is a statement of the homestead entries on Dominion lands for the years 1916 to 1923. Statistics of the origin of those making homestead entries in the fiscal years ended 1918 to 1923 are given in Table 3, and financial statistics of receipts from Dominion lands in Table 4.

The privilege of making pre-emptions or purchased homestead entries was withdrawn by Order in Council, from March 20, 1918, confirmed by chapter 19 of the Statutes of 1918, assented to May 24, 1918.

2.—Homestead Entries on Dominion Lands in Manitoba, Saskatchewan, Alberta and British Columbia, calendar years 1916-1923.

Provinces.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.
	No.	No.	No.	No.	No.	No.	No.	No.
Manitoba.....	2,616	1,617	873	1,209	795	1,477	878	556
Saskatchewan.....	4,519	2,967	1,273	1,840	1,726	2,729	2,046	1,664
Alberta.....	5,169	3,975	2,163	3,464	2,794	2,936	2,240	1,395
British Columbia.....	264	209	69	110	120	204	154	139
Total.....	12,568	8,768	4,378	6,623	5,435	7,346	5,318	3,754

3.—Homestead Entries made in Manitoba, Saskatchewan, Alberta and British Columbia, by Nationalities, during the fiscal years 1918-1923.

Nationalities.	1918.	1919.	1920.	1921.	1922.	1923.
	No.	No.	No.	No.	No.	No.
Canadians from Ontario.....	1,179	599	937	665	785	589
“ Quebec.....	425	260	298	270	318	198
“ Nova Scotia.....	138	53	106	78	83	71
“ New Brunswick.....	87	31	83	52	54	38
“ Prince Edward Island.....	49	17	47	37	47	31
“ Manitoba.....	403	238	365	237	398	299
“ Saskatchewan.....	177	75	126	105	201	187
“ Alberta.....	158	87	144	134	220	193
“ British Columbia.....	47	28	37	27	55	40
Persons who had previous entry.....	1,087	606	875	871	946	844
Newfoundlanders.....	8	2	10	8	4	6
Canadians returned from the United States.....	10	6	13	3	3	3
Americans.....	2,084	570	1,318	1,072	1,505	1,019
English.....	888	639	1,252	821	762	575
Scottish.....	285	182	360	242	229	133
Irish.....	142	87	154	114	92	70
French.....	54	38	58	32	63	21
Belgians.....	39	19	26	36	37	24
Swiss.....	24	8	13	18	17	18
Italians.....	25	21	12	19	22	10
Rumanians.....	19	7	10	12	48	11
Syrians.....	2	1	4	1	2	3
Germans.....	10	7	5	22	40	33
Austro-Hungarians.....	125	38	69	170	712	420
Hollanders.....	42	15	13	9	23	16
Danes (other than Icelanders).....	46	29	35	46	44	33
Icelanders.....	38	10	20	14	19	15
Swedes.....	195	60	82	71	173	107
Norwegians.....	248	83	92	84	159	113
Russians (other than Finns).....	217	74	105	91	168	96
Finns.....	—	—	—	—	40	30
Chinese.....	1	4	1	—	2	1
Japanese.....	2	2	—	—	—	—
Persians.....	2	—	—	—	2	1
Australians.....	6	1	5	2	3	2
New Zealanders.....	2	—	1	1	3	2
Greeks.....	—	1	—	—	—	1
Hindus.....	—	—	—	—	65	78
Poles.....	—	—	—	—	—	—
Bulgarians.....	4	—	—	—	—	—
Serbians.....	2	1	4	—	—	2
Spaniards.....	1	—	—	—	2	—
South Americans.....	—	—	—	—	—	—
Hebrews.....	2	—	—	—	1	7
South Africans.....	—	—	—	—	—	—
Armenians.....	—	—	—	—	—	1
Mexicans.....	—	—	—	—	—	—
Other nationalities.....	46	28	51	23	—	—
Total.....	8,319	4,227	6,732	5,389	7,349	5,343

4.—Receipts from Patents and Homestead Entries in the fiscal years 1918-1923.

Sources of Receipts.	1918.	1919.	1920.	1921.	1922.	1923.
	\$	\$	\$	\$	\$	\$
Homestead fees.....	83,180	42,190	67,460	53,880	73,540	53,460
Cash sales.....	3,046,092	2,192,861	2,799,605	1,721,172	761,850	435,396
Scrip sales.....	131	323	80	—	—	—
Timber dues.....	482,006	408,728	589,780	705,314	683,491	825,465
Hay permits, mining, stone quarries, etc., cash.....	630,473	630,976	896,414	1,234,558	1,071,396	814,427
All other receipts.....	315,928	341,204	385,582	371,152	328,253	302,119
Gross revenue.....	4,557,816	3,616,282	4,738,921	4,086,076	2,918,530	2,430,867
Refunds.....	113,685	76,031	116,249	130,751	119,080	83,152
Net revenue.....	4,444,130	3,540,251	4,622,672	3,955,325	2,799,450	2,347,715
Total revenue, 1872 to date.....	59,278,582	62,819,848	67,442,520	71,397,845	74,197,295	76,535,010
Letters patent for Dominion lands.. No.	23,227	16,810	17,732	17,947	13,116	6,973
Homestead entries..... “	8,319	4,227	6,732	5,389	7,349	5,343

Railway Lands.—Table 5 is a record for the three fiscal years, 1922 to 1924, of the sales of lands by the Hudson's Bay Company and by railway companies having government land grants. The total sales in the fiscal year ended Mar. 31, 1924, amounted to 159,795 acres, at a price of \$2,460,057, as compared with 123,303 acres at a price of \$1,864,364, in the previous fiscal year. The 1924 prices averaged \$15.39 per acre, as against \$15.18 in the preceding year.

5.—Land Sales by Railway Companies having Government Land Grants, and by the Hudson's Bay Company, in the fiscal years 1922-1924.

Companies.	1922.		1923.		1924.	
	Acres.	Amount.	Acres.	Amount.	Acres.	Amount.
		\$		\$		\$
Hudson's Bay Co.....	33,595	545,611	24,976	366,257	33,434	456,386
Canadian Pacific Railway Co.....	101,497	1,732,350	83,485	1,248,968	45,911	775,205
Manitoba Southwestern Colonization Railway Co.....	1,519	15,497	373	5,107	637	3,822
Qu'Appelle, Long Lake and Saskatche- wan Railroad and Steamboat Co.....	1,274	22,315	1,122	17,000	6,242	92,145
Calgary and Edmonton Railway Co....	3,024	51,603	1,013	15,552	1,283	14,144
Canadian Northern Railway Co.....	14,163	263,199	11,214	190,112	71,489	1,103,421
Great Northern Central Railway Co....	167	2,997	1,120	21,368	799	14,934
Total.....	155,239	2,633,572	123,303	1,864,364	159,795	2,460,057

2.—Provincial Public Lands.¹

In the Maritime Provinces, in Quebec, Ontario and British Columbia, the public lands are administered by the Provincial Governments. In Prince Edward Island, all the land is settled.

Nova Scotia.—In Nova Scotia there are no free grants of land; but, under conditions prescribed by the Crown Lands Act of the Provincial Assembly (10 Edw. VII, 1910, c. 4, s. 26), and an amending Act of May 3, 1912, Crown lands, not exceeding in each case 150 acres, may be granted for agricultural or grazing purposes to applicants of not less than 18 years of age, at the price of \$1 per acre, in

¹ For copies of the detailed regulations governing the disposal of provincial Crown lands, application should be made as follows: Nova Scotia, to the Secretary for Industries and Immigration, Halifax; New Brunswick, to the Deputy Minister of Lands and Mines, Fredericton; Quebec, to the Deputy Minister of Lands and Forests, Quebec; Ontario, to the Minister of Lands and Forests, Parliament Buildings, Toronto; British Columbia, to the Deputy Minister of Lands, Victoria.

addition to the expenses of survey. Leases and grants of Crown lands may also be obtained upon conditions prescribed. The total area of the Crown lands in Nova Scotia is approximately 798,368 acres.

New Brunswick.—The area of New Brunswick is about 17,143,000 acres. Of this, the Crown holds about 7,500,000 acres, most of which is timber land. The province is essentially a wooded country, and will in all probability always derive a large part of its revenue from lumbering industries. Practically all the Crown timber lands are held by license for the cutting of timber, most of these licenses expiring in the year 1933. While it may safely be said that the bulk of the Crown lands are better suited to lumbering than agriculture, yet there are still some Crown lands well suited to mixed farming, which may be taken up by prospective settlers. One hundred acres is the maximum allowed to any one settler, and he is required to reside on the land and cultivate ten acres of the same for three years before obtaining a grant. For some of the best lands there is a charge of \$1 per acre, in addition to the settlement duties already referred to. The Crown controls the right to hunt and fish within the province. Hunting of migratory birds and fishing in tidal waters are, however, under the control of the Dominion Government.

Quebec.—In Quebec the area of public lands subdivided and unsold on June 30, 1922, was 7,978,030 acres. During the year ended June 30, 1923, 343,560 acres were surveyed; 66,328 acres reverted to the Crown; 217,761 acres were granted for agricultural and industrial purposes, etc.; adding to the acreage available at June 30, 1922, the area surveyed and the areas that reverted, and deducting sales and grants, there remained, subdivided and unsold on June 30, 1923, 8,170,157 acres. Agricultural lands in 100-acre lots are available for settlement, upon prescribed conditions, at 60 cents per acre, on application to the Department of Colonization, Mines and Fisheries.

Ontario.—In Ontario the public lands which are open for disposal are chiefly situated in the districts of Muskoka, Parry Sound, Nipissing, Sudbury, Algoma, Timiskaming, Thunder Bay, Kenora and Rainy River, and in the counties of Haliburton, Peterborough, Hastings, Frontenac, Lennox and Addington and Renfrew. In Northern Ontario, which comprises the territory lying north and west of the Ottawa and French rivers, the townships open for sale are subdivided into lots of 320 acres, or sections of 640 acres, and a half-lot or quarter-section of 160 acres is allowed to each applicant at the price of 50 cents per acre, payable one-fourth cash and the balance in three annual instalments, with interest at 6 p.c. The applicant must be male (or sole female) head of a family, or a single man over 18 years of age. The conditions of purchase include actual occupation by the purchaser, the erection of a house, the clearance and cultivation of at least 10 p.c. of the area, and three years' residence. Proxy regulations enable an individual to purchase a half lot of 160 acres and place an agent in residence, but the duties to be performed before issue of patent are double those required in ordinary purchases.

Free grants are available on lands within the districts of Algoma, Nipissing, Thunder Bay, Sudbury, Rainy River and Kenora, and between the Ottawa river and Georgian bay, comprising portions of the counties of Renfrew, Frontenac, Addington, Hastings, Peterborough and Haliburton and the districts of Muskoka and Parry Sound. Grants of 160 acres are made to either single or married men in free grant territories where the land is subdivided in sections of 320 acres. In the Huron and Ottawa territory an allowance for waste lands may increase the grant of a single man to an area not exceeding 200 acres, while heads of families may secure 200 acres free and purchase an additional 100 acres at 50 cents an acre.

The settlement duties for free grants are as follows: (a) at least 15 acres to be cleared and brought under cultivation, of which 2 acres at least are to be cleared and cultivated annually; (b) a habitable house to be built, at least 16 by 20 feet in size; (c) actual and continuous residence upon and cultivation of the land for 3 years after location, and thence to the issue of the patent. The mines and minerals and all timber other than pine are covered by the patent.

Returned soldiers who enlisted and rendered overseas service with the Canadian Expeditionary Forces are each entitled to an allocation of 160 acres free, in any township regularly open for sale, subject nevertheless to the performance of settlement duties.

Ranching lands may be obtained on reasonable terms in waste and wooded areas, the valley of the Trent river, lying between lake Ontario and Georgian bay, affording good opportunities for cattle and sheep raising. The maximum annual rental is 5 cents an acre, on easy stocking conditions. Leases may be issued on condition that there be regularly maintained on the land such number of head of stock as may be consistent with the resources of the area covered.

Ontario includes 230,000,000 acres of land, of which only 14,500,000 acres are under cultivation. More than 20,000,000 acres of the very finest arable land await the plough. Ontario is $3\frac{1}{2}$ times as large as the British Isles, $1\frac{1}{2}$ times as large as Texas, and almost twice the size of France or Germany. From east to west its borders are 1,000 miles apart, and from north to south, 1,075 miles. Recent railway construction and colonization road building have made accessible vast tracts of untilled farm land and virgin forests in northern Ontario.

Loans are made to settlers in the northern and northwestern districts of Ontario. The maximum amount of any loan to be made to a settler is \$500, with interest at 6 p.c. per annum, upon such terms and conditions as the Loan Commissioner may approve. The Government of Ontario is anxious that all *bona fide* settlers shall take full advantage of the opportunity provided to secure any needed loan, and full information respecting it may be secured on application to the various Crown Lands Agents, or direct from the Settlers' Loan Commissioner, Toronto.

Sites for summer cottages under reasonable terms and conditions may be acquired by lease within the Government parks, including Algonquin Provincial Park, and by purchase in certain other sections of the province. Islands in Timagami are leased without building conditions, but islands elsewhere are sold in 5-acre parcels, subject in each case to the erection within 18 months of a building costing not less than \$500.¹ The price of mainland is \$10 and of islands \$20 per acre.

British Columbia.—In British Columbia there are large areas of free grant lands. Any British subject, being the head of a family, a widow, a *femme sole* who is over 18 years of age and self-supporting, a woman deserted by her husband, or whose husband has not contributed to her support for 2 years, a bachelor over 18 years of age, or any alien, on his making a declaration of his intention to become a British subject, may pre-empt free 160 acres of the unoccupied and unreserved surveyed Crown lands, not being an Indian settlement and not carrying more than 8,000 feet per acre of milling timber west of, and 5,000 feet per acre east of the Cascade range. Fees payable include \$2 for recording, \$2 for certificate of improvement and \$10 for Crown grant. Residence and improvement conditions are imposed. After occupation for 5 years and making improvements to the value of \$10 per acre, including clearing and cultivation of at least 5 acres, the pre-emptor may obtain

¹ Further particulars may be obtained on application to the Minister of Lands and Forests, Parliament Buildings, Toronto, Ont.

certificate of improvement and Crown grant. The fact that an applicant has previously homesteaded in another province does not preclude him from pre-empting in British Columbia. Unsurveyed lands cannot be pre-empted.

Homesite leases of an area not exceeding 20 acres, surveyed or unsurveyed, may be obtained for occupation and cultivation—this being a provision to enable fishermen, miners or others to obtain homesites—at a small rental, under improvement conditions, including the building of a dwelling in the first year, title being procurable after five years' occupation and completion of survey.

Under the Land Act, vacant and unreserved Crown lands, surveyed or unsurveyed, may be purchased in quantities not exceeding 640 acres for agricultural purposes, on improvement conditions. The Minister may require improvements to the value of \$5 per acre within 4 years of allowance of the sale, and Crown grant may be withheld until it is certified that improvements are made. The price of first class (agricultural) lands is \$5 per acre; second class (grazing) lands \$2.50 per acre.

Crown lands are leased, subject to covenants and agreements deemed advisable, for agricultural or industrial purposes—for hay-cutting, up to 10 years; for other purposes, except timber-cutting, up to 21 years.

The Land Settlement Board has selected a number of land settlement areas contiguous to the Canadian National Railways. Lands within these areas are sold on easy terms for farming purposes, conditional upon development, prices being usually from \$3 to \$10 an acre, a small cash payment being required, and the balance spread over a term of years to suit the purchaser. Returned British Columbia soldiers are entitled to abatement of \$500 on purchase price. The Board has power to enforce orders on those owning land within an area to improve it, and to levy a penalty tax for failure, also power to procure compulsory sale of undeveloped land. To established settlers, loans are made by the Board for development purposes of from \$250 to \$10,000, not exceeding 60 p.c. of improved value of land offered as security.

Timber-cutting rights are acquired by timber-sale. The applicant locates the timber, and, application being made, the area is cruised, surveyed if necessary, and advertised for sale by tender. All particulars are obtainable from the Forest Branch, Department of Lands. Information regarding water-rights for power, irrigation, etc., may be obtained by addressing the Water Rights Branch, Department of Lands.

The area of land administered by the province is 223,639,920 acres, of which 197,229,640 acres are vacant and unreserved; 6,488,137 acres are included in Indian, park, game, forest and other reserves, and 7,244,251 acres in timber, pulp, coal, grazing and other leases or licenses. The total area of surveys at Dec. 31, 1922, was 32,729,473 acres, including 22,620,266 acres of land surveys, 8,983,085 acres of timber, 658,462 acres of coal lands and 470,754 acres of mineral claims. The area included in cities is 56,390 acres and in district municipalities 892,360 acres.

The area of the province is 238,469,600 acres, of which 92,800,000 acres is above timberline, and 91,432,100 acres is forested—39,352,000 acres carrying over 1,000 ft. per acre and 17,281,600 acres from 5,000 to 30,000 ft. per acre. The area suitable for agriculture is estimated at 22,608,000 acres. On Vancouver island, an area of 2,110,054 acres is included in the Esquimalt and Nanaimo Ry. land grant, embracing the south-eastern portion of the island, and applications for lands in this area are to be made to the land agent of that railway at Victoria.

II.—PUBLIC DEFENCE.

Before the outbreak of the war, the Canadian Militia consisted of a Permanent Force, which on March 31, 1914, numbered 3,000 officers, non-commissioned officers and men, and an Active Militia, which at the same date numbered 5,615 officers and 68,991 non-commissioned officers and men. After the outbreak of the war on August 4, 1914, successive contingents of troops of all arms were recruited, equipped, trained and despatched by the Canadian Government to Great Britain for active service. When hostilities ceased on November 11, 1918, there had been sent overseas for active service in the Canadian Expeditionary Force about 418,000 officers, non-commissioned officers and men.¹

Organization.—Prior to 1922, three Departments of the Canadian Government were concerned with the defence of Canada, *viz.*: the Department of Militia and Defence; the Department of Marine and Naval Service; the Air Board.

During the session of 1922, the National Defence Act was passed, consolidating the Naval Service, the Air Board and the Department of Militia and Defence into the Department of National Defence. This Act became effective by proclamation on Jan. 1, 1923. Under it there is a Minister of National Defence and a Deputy Minister of National Defence. To advise the Minister, there has been constituted, by Order in Council, a Defence Council, consisting of: a President (the Minister), a Vice-President (the Deputy Minister) and the following members: the Chief of Staff, the Director of Naval Service, together with the Adjutant-General, the Quartermaster-General and the Director, Royal Canadian Air Force, as associate members. There is also a Secretary of the Council.

1.—Military Forces.

The Militia of Canada is constituted by the Militia Act. The Active Militia is divided into the Permanent and the Non-Permanent Militia.

Permanent Militia.—The Permanent Force consists of the following units:
Cavalry.—The Royal Canadian Dragoons; Lord Strathcona's Horse (Royal Canadians).

Artillery.—The Royal Canadian Horse Artillery Brigade ("A," "B" and "C" Batteries); Royal Canadian Artillery (Nos. 1, 2, 4 and 5 Batteries, Coast Artillery, and No. 3 Battery, Mobile Artillery).

Engineers.—Royal Canadian Engineers (13 detachments).

Signals.—The Royal Canadian Corps of Signals.

Infantry.—The Royal Canadian Regiment; Princess Patricia's Canadian Light Infantry; The Royal 22nd Regiment (a French-Canadian regiment).

Army Service Corps.—The Royal Canadian Army Service Corps (12 detachments).

Medical Corps.—The Royal Canadian Army Medical Corps (12 detachments).

Veterinary Corps.—The Royal Canadian Army Veterinary Corps (8 detachments).

Ordnance Corps.—The Royal Canadian Ordnance Corps (12 detachments).

Pay Corps.—The Royal Canadian Army Pay Corps (12 detachments).

Military Clerks.—The Corps of Military Staff Clerks (12 detachments).

¹ For the detailed expenditures of the Canadian Government on account of war appropriations for the years 1915-1921, see the Canada Year Book, 1921, p. 798.

The strength of the Permanent Militia is limited by the amending Act of 1919 to 10,000, but at present the authorized establishment is less than 3,500.

Schools of Instruction.—The Canadian Small Arms School.—This is the only school which is an independent unit of the Permanent Force, but at all stations of the Permanent Force in Canada there are conducted royal schools of instruction.

Non-Permanent Militia.—The Non-Permanent Militia consists of:

- 34 Regiments of Cavalry and Mounted Rifles.
- 62 Batteries of Field Artillery (light).
- 16 Batteries of Heavy and Siege Artillery.
- 9 Companies of Garrison Artillery.
- 15 Field Companies of Engineers.
- 2 Fortress Companies of Engineers.
- 7 Field Troops of Engineers.
- 17 Signal Companies.
- 2 Fortress Signal Companies.
- 7 Signal Troops.
- 12 Companies of Cyclists.
- 45 Companies of Canadian Officers Training Corps.
- 123 Battalions of Infantry.
- 15 Machine Gun Units.
- 21 Companies Army Service Corps.
- 60 Units of the Canadian Army Medical Corps.
- 11 Detachments of the Canadian Army Veterinary Corps.
- 11 Detachments of the Canadian Dental Corps.
- 11 Detachments of the Canadian Ordnance Corps.
- 13 Detachments of the Canadian Postal Corps.

The total establishment of the Non-Permanent Militia is 10,568 officers and 112,893 other ranks, as shown in the following table.

6.—Permanent and Non-Permanent Active Militia in Canada, 1924.

Arm of Service.	Permanent Active Militia.		Non-Permanent Active Militia.	
	Personnel.	Horses.	Personnel.	Horses.
Staff and General List.....	26	—	—	—
Cavalry and Mounted Rifles.....	428	355	11,779	10,560
Field Artillery.....	402	221	7,623	4,634
Heavy and Siege Artillery.....	—	—	2,026	905
Garrison Artillery.....	290	37	1,159	9
Engineers.....	265	23	3,336	627
Signals.....	116	—	3,519	1,311
Cyclist Companies.....	—	—	1,308	—
Infantry.....	816	32	70,549	702
Officers Training Corps.....	—	—	5,724	—
Machine Gun Corps.....	—	—	6,602	1,497
Non-Combatants.....	1,140	78	9,428	2,120
Total.....	3,483	746	123,053	22,365

Reserve Militia.—In addition to the Active Militia, there is also the Reserve Militia, a framework designed to serve as a basis for contingent military organization. Drill and training are voluntary and entail no expense to the public.

The reserve formations of the Active Militia, as distinguished from the Reserve Militia mentioned above, comprise:

(a) Corps Reserve, which consists of reserve units of city and rural corps of qualified officers, who are not to exceed in numbers those authorized for the training establishment of the corps concerned, and of warrant officers, non-commissioned officers and men who have completed not less than three annual trainings and who desire to transfer to, or re-engage in a reserve unit.

(b) The Reserve of officers, which is made up of qualified officers who transfer from the active list after a certain period of service in their rank.

Military Districts.—For the command, training and administration of the Canadian Militia, Canada is divided into eleven military districts, each under a commander, assisted by a district staff.

Militia Appropriations.—The militia appropriations for the four fiscal years ended Mar. 31, 1921-24, are shown by items in a table on p. 913 of the 1922-23 Year Book. They aggregated \$12,802,238, \$12,563,751, \$10,851,779, \$10,798,918, for these respective years, as compared with \$9,757,770 for the fiscal year ending Mar. 31, 1925.

Some changes were made in the classification of the Militia Estimates for the fiscal year 1924-25, as submitted to Parliament, with a view to a more logical arrangement whereby the main functions and activities of the militia services could be determined at a glance. Certain of the former appropriations have therefore been combined under new votes (or main purpose heads) as indicated in Table 7.

7.—Militia Appropriations for year ending March 31, 1925.

New Classification.	Old Classification.	New Class'n Amount.	Old Class'n Amount.
		\$	\$
Administration.....	Pay of Staff.....	301,000	—
	Printing and Stationery.....	—	250,000
	Departmental Library.....	—	50,000
Cadet Services.....	Departmental Library.....	—	1,000
Contingencies.....	Cadet Services.....	400,000	400,000
Engineer Services and Works.....	Contingencies.....	30,000	30,000
General Stores.....	Engineer Services and Works (part).....	500,000	500,000
	Clothing and Necessaries.....	390,000	—
	Warlike Stores.....	—	151,959
	Ordnance Arms, Lands (Part).....	—	212,041
	Customs Dues (Part).....	—	15,000
Manufacturing Establishments.....	Customs Dues (Part).....	—	11,000
	Dominion Arsenal, Quebec.....	420,000	—
	Dominion Arsenal, Lindsay.....	—	353,700
	Ordnance Arms, Lands (Part).....	—	9,000
	Engineer Services (Part).....	—	45,000
	Customs Dues (Part).....	—	11,300
Non-Perm. Active Militia.....	Customs Dues (Part).....	—	1,000
	Annual Drill.....	1,610,000	—
	Schools of Instruction.....	—	910,000
	Allowances Non-Perm. Active Mil.....	—	100,000
	Grants to Ass'c'ns and Bands.....	—	100,000
	Maint'ce Mil. Properties.....	—	250,000
	Salaries and Wages.....	—	250,000
Permanent Force.....	Permanent Force.....	4,800,000	4,800,000
Royal Military College.....	Royal Military College.....	365,000	—
	Engineer Services (Part).....	—	345,000
	Topographic Survey.....	—	20,000
Topographic Survey.....	Topographic Survey.....	35,000	35,000
Transport and Freight.....	Transport and Freight.....	160,000	160,000
Misc. Small Votes.....	Misc. Small Votes.....	2,215	2,215
Total.....	Total.....	9,013,215	9,013,215
Civil Government ¹	Civil Government ¹	744,555 ¹	744,555 ¹
Grand Total.....	Grand Total.....	9,757,770	9,757,770

¹ Department of National Defence.

2.—The Naval Service.

The Department of Naval Service was amalgamated with the Department of Militia and Defence and the Canadian Air Board, to form the Department of National Defence, in 1922.

The Royal Canadian Navy and its Reserve Forces are under the direction of the Director of Naval Service, who is a member of the Defence Council. The Service consists of:

1. Headquarters at Ottawa (permanent);
2. Royal Canadian Navy (permanent);
3. Royal Canadian Naval Reserve (non-permanent);
4. Royal Canadian Naval Volunteer Reserve (non-permanent).

Royal Canadian Navy.—The Royal Canadian Navy is composed of 73 officers and 394 ratings. A large majority of the men of the R.C.N. are serving under seven-years' engagements. A small proportion consist of specialist gunnery, torpedo and engine room ratings, lent from the Royal Navy, and a small proportion are ex-Royal Navy petty officers and men serving under special service engagements of from two to five years.

A proportion of the officers of the Royal Canadian Navy serve periodically in ships of the Royal Navy, to acquire experience in capital ships, light cruisers, etc., and training courses are arranged for selected officers at the instructional schools of the Royal Navy, to qualify in war staff, gunnery, torpedo, wireless, etc., duties. Courses for selected men in the gunnery, torpedo and mechanical training schools of the Royal Navy are similarly arranged.

The ships of the Royal Canadian Navy are:

- H.M.C.S. *Aurora* (light cruiser—in reserve);
- H.M.C.S. *Patriot* (destroyer—in commission);
- H.M.C.S. *Patrician* (destroyer—in commission);
- H.M.C.S. *Thiepval* (minesweeper—in commission);
- H.M.C.S. *Armentieres* (minesweeper—in commission);
- H.M.C.S. *Festubert* (minesweeper—in commission);
- H.M.C.S. *Ypres* (minesweeper—in commission);
- Submarines C.H. 14 and 15 (in reserve).

Naval training establishments, comprising naval barracks, gunnery drill shed, with all modern appliances for teaching gun-laying, sight-setting, etc., and parade ground, are maintained at Halifax and Esquimalt. Naval dockyards, with workshops, etc., for refitting and supplying necessary stores to H.M.C. ships, are also maintained at Halifax and Esquimalt.

Royal Canadian Naval Reserve.—The Royal Canadian Naval Reserve consists of 70 officers and 430 men recruited from amongst sea-faring personnel. Officers have been appointed to act as registrars at Halifax, Lunenburg, Charlottetown, St. John, Quebec, Montreal, Prince Rupert, Victoria and Vancouver.

Officers and men of the Royal Canadian Naval Reserve attend naval training at Halifax or Esquimalt for 42 days for the first year of enrolment, and for 14 days annually subsequently. They are permitted to volunteer for service afloat up to a maximum of 6 months during each period of enrolment. The period of enrolment in the Royal Canadian Naval Reserve is 5 years.

Royal Canadian Naval Volunteer Reserve.—The Royal Canadian Naval Volunteer Reserve consists of 70 officers and 930 men, organized as a division and

distributed as follows: St. John (company); Charlottetown (half company); Quebec (half company); Montreal (English half company and French half company); Ottawa (half company); Toronto (half company); Hamilton (half company); Winnipeg (company); Saskatoon (half company); Regina (half company); Edmonton (half company); Calgary (half company); Vancouver (half company).

Each company or half company is under the immediate command of an officer of the R.C.N.V.R., appointed as company commanding officer. The company commanding officer is assisted by two or more commissioned officers of the force.

A petty officer instructor (a highly qualified petty officer of the Royal Navy or of the Royal Canadian Navy) is employed at each company headquarters to give instruction to men of the company in gunnery, seamanship and other naval subjects.

Each officer and man of the R.C.N.V.R. performs annually a minimum of 30 drills of one hour's duration at company headquarters. In actual practice 40 to 50 drills have been performed annually by each member of the company. Officers and men also attend from two to three weeks' naval training annually at the naval bases at Halifax or Esquimalt.

Officers and men who can obtain the necessary leave of absence are permitted to perform a maximum of 4 months' voluntary service during the period of enrolment, and a large number have availed themselves of this opportunity of gaining extended naval experience under sea-going conditions. The period of enrolment in the R.C.N.V.R. is three years.

3.—Royal Canadian Air Force.

Under the provisions of the National Defence Act, 1922, the powers, duties and functions given the Air Board under the Air Board Act of 1919 are vested in the Minister of National Defence.

The executive duties previously carried out by the Air Board are now performed by the Royal Canadian Air Force. The Air Force includes a directorate in the Chief of Staff's Branch of the Department of National Defence, headquarters at Ottawa and units at the following stations: Vancouver, B.C.; High River, Alta.; Winnipeg, Man., with operating bases at Victoria Beach, Norway House and Pas; Camp Borden, Ont., the main training base of the Royal Canadian Air Force; Ottawa, Ont., and Dartmouth, N.S. The strength of the Royal Canadian Air Force, permanent service, was, on March 31, 1924, 61 officers and 262 men. Its functions are:

(a) *Air Force training and operations.*—The main training base of the Royal Canadian Air Force at Camp Borden, Ont., provides training in Air Force duties for officers and men of the permanent service, combined operations with military and naval services, Air Force cadet training, and such other courses of training as may be necessary.

(b) *The control of commercial flying.*—This branch is charged with the inspection and licensing of aircraft for airworthiness; the examination of pilots, air engineers and air navigators for competency; the licensing of air harbours, and the supervision of commercial operations generally.

(c) *The conduct of flying operations for civil branches of the Government service.*—This work includes forest fire prevention patrols on a large scale in Manitoba, Alberta and British Columbia; aerial photography for the many services, including the Topographical and Geodetic Surveys, the Water Powers Branch, and the Department of Public Works; fishery protection patrols on the Pacific coast;

transportation in the remoter parts of the country for many branches, and special flights for the customs and immigration authorities, the Royal Canadian Mounted Police, etc.

The sum included in the estimates for 1924-25 for the Royal Canadian Air Force was \$1,300,000.

4.—The Royal Military College.

The Royal Military College of Canada was founded in 1876 by the Honourable Alexander Mackenzie, Prime Minister of Canada. Since its foundation, 1,710 gentlemen cadets have been enrolled; of this number 146 are now in attendance and approximately 175, though their names appear on the college roll as having been admitted, either did not actually do so, or if they did join, were only at the college a very short time.

The Royal Military College has a very distinguished record in connection with the war. Of the 914 graduates and ex-cadets who served, 353 were granted commissions direct from the College, and 43 enlisted with a view to obtaining commissions; 138 ex-cadets were reported as killed in action, dead of wounds, or missing. Ex-cadets of the College won the following honours and decorations: 1 Victoria Cross and 3 recommendations for the Victoria Cross, 106 Distinguished Service Orders, 109 Military Crosses, 2 Distinguished Flying Crosses, 62 other British decorations, 42 foreign decorations. Three Canadian and one Australian Divisions were commanded by graduates of the College. The graduates who served in the war included 1 Lieutenant-General, 8 Major-Generals and 26 Brigadier-Generals.

The establishment of the College, as stated in the Act of 1874 (37 Vict., c. 36), was "for the purpose of imparting a complete education in all branches of military tactics, fortifications, engineering and general scientific knowledge in the subjects connected with and necessary to a thorough knowledge of the military profession, and for qualifying officers for command and staff appointments." In addition to the foregoing, the course of instruction is such as to afford a thorough practical and scientific training in civil engineering, surveying, physics and chemistry, English and French. Strict discipline, combined with physical training, riding, drill and outdoor games, forms part of the curriculum.

The College is situated on a beautiful peninsula, one mile from Kingston, with the Cataraqui river on the one side, emptying into the St. Lawrence river at its junction with lake Ontario, and Navy bay on the other. The grounds include about 500 acres. The buildings of the College proper are situated on the above-mentioned peninsula, comprising 60 acres. The remainder of the grounds, on which stands the historic fort Henry, are at the disposal of the College for use as a training area. On the point of the College peninsula is situated fort Frederick, built in 1837, when Kingston became the capital of Canada, the fort comprising a portion of the defences of Kingston. The College is under the supervision of Militia Headquarters, which appoints annually an advisory board composed of leading Canadian citizens, both civil and military. The staff is composed of a commandant and a staff-adjutant, assisted by a competent staff of civil and military professors and instructors.

A four years' course leads to a "Diploma with Honours" or "Diploma" and "Certificate of Discharge." A number of commissions in the Canadian Permanent Force, as well as commissions in the Royal Artillery, Royal Engineers and other branches of the regular British Army are annually offered to graduates. To

those graduates joining the British Army, the privilege of one year's seniority is granted in the British or Indian Armies. This has been arranged in order to equalize the seniority of graduates of the Royal Military College of Canada with those of Woolwich or Sandhurst, since the course at the latter institutions is shorter than the Canadian. Positions in the Public Works Department, Hydrographic Surveys, etc., may also be obtained by graduates. Several Canadian universities admit graduates to the third years of arts and science courses.

III.—PUBLIC WORKS.

Since Confederation and before, the Department of Public Works has been known as the constructing Department. In 1879 the railways and canals were placed under control of a new Department, the building and maintenance of penitentiaries were transferred to the Department of Justice, the maintenance and construction of lighthouses to the Marine and Fisheries Department, and the smaller drill halls and armouries to the Department of Militia and Defence. The work of the Department of Public Works is now divided into three principal branches, *viz.*, the Engineering Branch, the Architect's Branch and the Telegraph Branch.

Engineering.—The Engineering Branch conducts the construction and repair of wharves, piers, breakwaters, dams, weirs, bank and beach protection works, the improvement of harbours and rivers by dredging, the construction, maintenance and operation of government dredging plant, the construction and maintenance of graving docks, the construction, maintenance and working of slides and booms, the construction and maintenance of interprovincial bridges and approaches thereto, and of bridges on highways of national importance in the Northwest Territories, the maintenance of military roads, also hydrographic and ordinary surveys and examinations, inclusive of some precise levelling and geodetic measurements which are required for the preparation of plans, reports and estimates, the testing of cements, etc. The Branch has charge of about 1,845 harbour works, 5 graving docks, 4 slide and boom works, interprovincial bridges, 39 dredges and 200 tugs, scows and other dredging plant.

Architecture.—The Architect's Branch builds and maintains Government buildings, post offices, customs houses, examining warehouses, and constructs quarantine, immigration and experimental farm buildings, armouries, military hospitals and drill halls, land offices and telegraph offices. The most important public buildings now under construction are the new Houses of Parliament and the addition to the Archives building at Ottawa.

Telegraphs.—The Telegraph Branch has control over the construction, repair and maintenance of all Government-owned telegraph lines and cables. These lines are located in the provinces of Nova Scotia, New Brunswick, Quebec, Ontario, Saskatchewan, Alberta, British Columbia and the Yukon.

Graving Docks.—There are five graving or dry docks built and owned by the Canadian Government. The dimensions of these docks are shown in Table 8. The dock at Kingston, Ontario, is under lease to the Kingston Shipbuilding Company. The dock at Lauzon, Quebec, east of the old dock, is 1,150 feet long, divided into two parts (650 and 500 feet respectively), and 120 feet wide; it has a depth at high water of 40 feet. It cost about \$3,850,000. A new dock is under construction at Esquimalt, B.C.; the dimensions are given in Table 8. Under the Dry Dock Subsidies Act, 1910 (9-10 Edw. VII, c. 17) several docks have been subsidized by payments of 3 or 3½ p.c. per annum on the original cost for a given number of years, as shown by Table 9.

8.—Dimensions of Graving Docks owned by the Dominion Government.

Locations.	Length.	Width at			Depth of water on sill.	Rise of tide.	
		Coping.	Bottom.	Entrance.		Spring.	Neap.
	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.
Lévis, Que.....	600.3	100	59.3	67.6	25.8	13	13.3
Esquimalt, B.C.....	430	90	41	65	26.5	7 to 10	3 to 8
Esquimalt, B.C. (New).....	1,150	135	125	125	40	7 to 10	3 to 8
Kingston, Ont.....	308.6	79	47	55	14.5 & 16.5	—	—
Lanzon, Que.....	1,150	144	105	120	40 H.W.	18	13.3

9.—Dimensions and Cost of Graving Docks subsidized under the Dry Dock Subsidies Act, 1910.

Locations.	Length.	Width.	Depth over sill.	Total cost.	Subsidy.
	Feet.	Feet.	Feet.	\$	
Collingwood No. 1, Ont.....	515.1	59.8	16	500,000	3 p.c. for 20 years.
Collingwood No. 2, Ont.....	413.2	95	16	306,965	3 p.c. for 20 years.
Port Arthur, Ont.....	708.3	77.6	16.2	1,258,053	3 p.c. for 20 years.
Montreal, Que.....	600	100	27.5	3,000,000	3½ p.c. for 35 years.
Prince Rupert, B.C.....	600	100	25	2,199,168	3½ p.c. for 25 years.
St. John, N.B.....	1,150	133	42	—	Building.
Vancouver, B.C. (Floating Dock).....	556.5	98	28	—	—

Expenditure and Revenue.—Table 10 shows the expenditure and revenue, for the fiscal years 1918-23, of the Public Works Department of the Dominion Government. For the fiscal year 1923, the expenditure was \$14,283,079, as compared with \$17,939,494 in 1922, a reduction of \$3,656,415, accounted for by reduced expenditure in all services.

10.—Expenditure and Revenue of the Public Works Department for the fiscal years 1918-1923.

EXPENDITURE.

Items.	1918.	1919.	1920.	1921.	1922.	1923.
	\$	\$	\$	\$	\$	\$
Harbour and river works....	5,551,774	3,181,349	4,320,581	7,541,668	6,142,157	5,042,747
Dredging plant, etc.....	1,405,838	677,500	1,205,486	1,456,243	1,211,582	1,380,902
Slides and booms.....	64,859	56,169	33,339	—	—	—
Roads and bridges.....	18,991	24,952	202,883	196,209	596,193	84,367
Public buildings.....	5,843,289	7,466,679	8,442,124	8,443,892	7,401,222	6,221,186
Telegraphs.....	751,452	789,883	885,739	1,083,242	1,024,116	959,889
Miscellaneous.....	419,005	706,464	1,028,185	1,031,528	765,697	593,988
Total.....	14,055,208	12,502,996	16,118,333	19,732,782	17,140,967	14,283,079
From War Appropriation for Military Hospitals.....	—	8,492,504	4,337,127	1,217,892	798,527	—
Grand Total.....	—	21,395,500	20,455,460	20,970,674	17,939,494	14,283,079

¹In the fiscal year 1920-21, the slide and boom works were leased or transferred to operating companies.

10.—Expenditure and Revenue of the Public Works Department for the fiscal years 1918-1923—concluded.

REVENUE.

Items.	1918.	1919.	1920.	1921.	1922.	1923.
	\$	\$	\$	\$	\$	\$
Slides and booms.....	26,188	16,763	48,133	¹	¹	¹
Graving docks.....	56,484	72,428	81,148	64,918	112,194	105,337
Rents.....	106,205	101,664	143,355	128,148	111,111	139,118
Telegraph lines.....	204,878	231,332	277,749	330,470	290,131	286,037
Casual revenue.....	27,737	108,295	81,073	199,583	180,691	251,696
Ferries.....	—	—	1,632	2,010	2,093	2,343
Total.....	421,492	530,482	633,090	725,129	696,220	784,531

¹In the fiscal year 1920-21, the slide and boom works were leased or transferred to operating companies.

IV.—THE INDIANS OF CANADA.¹

The Indians of Canada number about 109,000, their numbers varying but slightly from year to year. A small yearly increase is evident, however, and the popular notion that the race is disappearing is not in accordance with facts. Before they were subjected to the degenerating effects of European civilization and the devastating results of the many colonial wars, the numbers of both the Indians and Eskimos were undoubtedly larger, but any reliable information as to the aboriginal population during either the French or the early British *régime* is non-existent, and there is no adequate basis for a comparison between the past and present aboriginal populations.

Administration.—Indians are minors under the law, and their affairs are administered by the Department of Indian Affairs under the authority of the Indian Act. This Department is the oldest governmental organization in the Dominion, dating back to the time of the conquest. It was originally under the military authorities, and did not become a part of the civil administrative machinery until 1845. By section 5 of the British North America Act, 1867, the Indians of Canada and the lands reserved for them came under the control of the Dominion Government, and in 1873 an Act of the Canadian Parliament (R.S., c. 81) provided that the Minister of the Interior should be Superintendent-General of Indian Affairs, and as such have the control and management of the lands and property of the Indians in Canada. The aim of the Department of Indian Affairs is the advancement of the Indians in the arts of civilization, and agents have been appointed to encourage the Indians under their charge to settle on the reserves and to engage in industrial pursuits.

The system of reserves, whereby particular areas of land have been set apart solely for the use of Indians, has been established in Canada from the earliest times. It was designed in order to protect the Indians from encroachment, and to provide a sort of sanctuary where they could develop unmolested until advancing civilization had made possible their absorption into the general body of the citizens.

¹ The letter-press under this heading is taken in the main from the article contributed by the Department of Indian Affairs to the 1921 edition. Paragraphs on the linguistic stock and tribal origin of the Indian population, their industries and occupations, their health, sanitation and dwellings, appearing on pages 786-789 of the 1921 edition, are not reprinted.

Reserves have been set aside for the various bands of Indians throughout the Dominion, and the Indians located thereon are under the supervision of the local agents of the Department. The activities of the Department, as guardian of the Indians, include the control of Indian education, health, etc., the development of agriculture and other pursuits among them, the administration of their funds and legal transactions, and the general supervision of their welfare.

The educational work of the Department is now very extensive. A total of 340 Indian schools are in operation, comprising 255 day schools, 72 residential schools, and 13 combined Public and Indian schools.

The local administration of the Indian bands on the reserves scattered throughout the Dominion is conducted through the Department's agencies, of which there are in all 114. The number of bands included in an agency varies from one to more than thirty. The staff of an agency usually includes various officers in addition to the agent, such as medical officer, clerk, farm instructor, field matron, constable, stockman, etc., according to the special requirements of the agency in question. The work of the agencies is supervised by the Department's inspectors, each inspector having charge of a certain number of agencies. Expenditures upon destitute Indians are made by the Dominion Government, either from public funds or from the tribal funds of the Indians themselves.

The Indian Act provides for the enfranchisement of Indians. When an Indian is enfranchised he ceases to be an Indian under the law, and acquires the full status of citizenship. In the older provinces, where the Indians have been longer in contact with civilization, many are becoming enfranchised. Great discretion, however, is exercised by the Government in administering this problem, as Indians who become enfranchised lose the special protection attached to their wardship, so that it is necessary to guard against premature enfranchisement.

Treaties.—In the older eastern provinces, the history of the Indians has been one of slow development with that of the community. In western Ontario and the Prairie Provinces, the situation has been different. There the rapid spread of civilization made it necessary to take prompt and effective measures to protect the moral claims of the Indians, which are recognized by the Government. Accordingly, treaties were entered into with the Indians, whereby the latter ceded to the Crown their aboriginal title and interest in the country. In consideration of such cession, the Crown agreed to set aside adequate reserves, make cash grants, provide per capita annuities, give assistance in agriculture, stock-raising, hunting, trapping, etc., as particular circumstances might require, provide education for the Indian children, and otherwise safeguard the Indians' interests. These treaties have been made from time to time as occasion arose and as new territories were opened up. No treaty has been made with the Indians of British Columbia, but their welfare has received no less attention from the Government on that account.

Government Expenditure.—On March 31, 1923, the capital of the Indian Trust Fund, which a year earlier had amounted to \$11,402,577, had increased to \$11,516,213. The amounts expended from the Consolidated Revenue Fund were as follows: voted by Parliament for the purposes of the Department, \$3,007,898; annuities by statute, \$222,848.

Statistics.—Statistical tables of population, school attendance, income and agricultural activities of the Indians in Canada are appended. The figures in Table 11 are compiled from reports of the various censuses since Confederation, while the remaining tables contain data from the last annual report of the Department of Indian Affairs.

11.—Indian Population of Canada, 1871-1921.

Provinces.	1871.	1881.	1891.	1901.	1911.	1921.
Prince Edward Island.....	323	281	314	258	248	235
Nova Scotia.....	1,666	2,125	2,076	1,629	1,915	2,048
New Brunswick.....	1,403	1,401	1,521	1,465	1,541	1,331
Quebec.....	6,988	7,515	13,361	10,142	9,993	11,566
Ontario.....	12,978	15,325	17,915	24,674	23,044	26,436
British Columbia.....	23,000	25,661	34,202	28,949	20,134	22,377
Manitoba.....				16,277	7,876	13,869
Saskatchewan.....				26,304	11,718	12,914
Alberta.....	56,000	56,239	51,249	3,322	11,630	14,557
Yukon Territory.....				14,921	1,489	1,390
Northwest Territories.....					15,904	3,873 ¹
Total.....	102,358	108,547	120,638	127,941	105,492	110,596

¹ The smaller Indian population of the Northwest Territories in 1921 is to be ascribed to the extension of the boundaries of Quebec, Ontario and Manitoba in 1912, which also accounts for the increase in their 1921 Indian populations.

12.—Attendance of Pupils at Indian Schools, by Provinces, fiscal year ended March 31, 1923.

Provinces.	Number of Schools.	Number of Pupils on Roll.			Average attendance.	Percentage of attendance.
		Boys.	Girls.	Total.		
Prince Edward Island.....	2	20	17	37	15	40.54
Nova Scotia.....	14	145	148	293	144	49.15
New Brunswick.....	11	141	129	270	161	59.63
Quebec.....	32	812	787	1,599	1,034	64.61
Ontario.....	95	1,968	1,882	3,850	2,360	61.41
Manitoba.....	53	1,010	992	2,002	1,309	66.17
Saskatchewan.....	31	746	753	1,499	1,147	76.52
Alberta.....	25	525	549	1,074	866	80.63
British Columbia.....	60	1,330	1,300	2,630	1,760	66.95
Yukon.....	9	135	104	239	139	58.16
Northwest Territories.....	8	99	131	230	171	74.35
Total.....	340	6,931	6,792	13,723	9,106	66.58

13.—Acreage and Value of Indian Lands, by Provinces, 1923.

Provinces.	Total acreage of reserves.	Land cleared but not under cultivation.	Land under cultivation.	Value of Lands.
	Acres.	Acres.	Acres.	\$
Prince Edward Island.....	1,527	400	401	20,000
Nova Scotia.....	21,701	3,443	1,250	82,084
New Brunswick.....	20,782	1,067	378	72,254
Quebec.....	175,220	17,691	9,815	1,405,195
Ontario.....	1,044,924	75,382	64,339	4,983,230
Manitoba.....	415,477	115,744	12,630	2,933,273
Saskatchewan.....	1,190,304	771,732	44,232	12,753,547
Alberta.....	1,307,343	869,786	55,183	17,189,881
British Columbia.....	733,891	270,913	29,084	13,502,165
Total.....	4,911,259	2,126,158	217,312	52,941,629

14.—Area and Yield of Principal Field Crops of Indians, by Provinces, 1923.¹

Provinces.	Wheat.		Oats.		Other Grain.	
	Acres.	Bush.	Acres.	Bush.	Acres.	Bush.
Prince Edward Island.....	7	60	40	410	—	—
Nova Scotia.....	4	75	53	923	3	38
New Brunswick.....	17	191	120	1,995	27	415
Quebec.....	336	5,047	2,474	37,817	495	5,156
Ontario.....	3,222	35,222	12,989	275,953	3,328	62,539
Manitoba.....	3,477	42,497	1,940	33,332	1,540	22,550
Saskatchewan.....	11,632	160,812	13,521	235,734	715	11,527
Alberta.....	10,200	147,364	8,879	49,440	969	8,550
British Columbia.....	2,102	25,055	4,108	110,117	379	6,875
Total.....	30,997	416,323	44,124	745,721	7,456	117,650

Provinces.	Potatoes. ³		Other Roots.		Hay and Fodder.
	Acres.	Bush.	Acres.	Bush.	Tons.
Prince Edward Island.....	20	1,500	1	50	—
Nova Scotia.....	107	4,848	12	459	73
New Brunswick.....	71	6,465	14	1,463	7
Quebec.....	1,008	30,295	80	2,996	1,028
Ontario.....	1,807	97,357	1,397	28,471	12,567
Manitoba.....	395	35,364	40	1,616	504
Saskatchewan.....	345	15,648	51	4,338	34,055
Alberta.....	167	13,613	57	1,843	3,456
British Columbia.....	2,501	296,824	937	39,626	1,383
Total.....	6,423	502,034	2,589	80,942	53,063

¹Season of 1922. ²Includes 80 bus. from the Yukon Territory. ³Includes 2 acres and 120 bus. from Yukon Territory.

15.—Numbers of Farm Live Stock of Indians, with Total Values, by Provinces, 1923.

Provinces.	Horses.	Cattle.	Poultry.	Value of Live Stock and Poultry.
	No.	No.	No.	\$
Prince Edward Island.....	15	43	198	3,500
Nova Scotia.....	59	244	857	13,800
New Brunswick.....	42	73	414	6,454
Quebec.....	906	4,424	13,054	173,035
Ontario.....	4,316	10,549	65,849	695,166
Manitoba.....	1,928	4,105	3,273	252,130
Saskatchewan.....	5,525	6,633	7,624	668,215
Alberta.....	14,680	6,888	1,253	568,460
British Columbia.....	14,250	17,206	32,565	993,070
Total.....	41,722¹	50,197²	125,123³	3,374,730

¹Includes 1 in Yukon Territory. ²Includes 2 in Yukon Territory. ³Includes 36 in Yukon Territory.

16.—Sources and Values of Income of Indians, 1923.

Provinces.	Value of			Re- ceived from land rentals.	Earned by			Total Income of Indians.
	Farm products, including hay.	Beef sold or used for food.	Wages earned.		Fish- ing.	Hunting and Trapping.	Other Indus- tries.	
	\$	\$	\$	\$	\$	\$	\$	\$
Prince Edward Island...	2,500	350	1,250	—	1,450	75	7,000	12,625
Nova Scotia.....	16,770	3,387	60,141	—	8,425	6,575	31,84	128,196
New Brunswick.....	9,159	205	24,500	200	4,775	3,825	4,825	59,205
Quebec.....	139,502	25,019	464,337	9,512	6,145	232,910	96,480	1,021,039
Ontario.....	756,332	46,533	1,016,721	22,700	179,145	447,872	181,999	3,036,463
Manitoba.....	165,974	8,195	139,357	4,283	57,495	348,216	43,380	830,387
Saskatchewan.....	427,395	59,654	101,936	7,019	27,541	206,415	85,893	1,056,210
Alberta.....	314,061	49,618	116,742	57,098	11,957	347,631	61,980	1,100,717
British Columbia.....	677,902	63,825	612,843	21,311	480,801	465,057	271,482	2,703,914
Total.....	2,509,595	256,786	2,528,826	122,132	786,734	2,058,576	784,798	9,940,349¹

¹Includes \$593, income received from timber by Indians of the Fort Simpson agency in the Northwest Territories.

V.—DEPARTMENT OF SOLDIERS' CIVIL RE-ESTABLISHMENT AND BOARD OF PENSION COMMISSIONERS FOR CANADA.

Three organizations are associated together in dealing with the care, treatment, pensions and rehabilitation of former members of the forces, namely, the Department of Soldiers' Civil Re-establishment, the Board of Pension Commissioners for Canada and the Federal Appeal Board. The Department of Soldiers' Civil Re-establishment is responsible for the medical treatment, vocational training and care of all returned soldiers requiring its assistance; it is also responsible for the payment of all pensions and allowances to which these men may be entitled. The Board of Pension Commissioners is responsible for the adjudication and award of pensions. The Federal Appeal Board, which was created by an amendment to the Pension Act in 1923, is authorized to hear appeals against decisions of the other two bodies in respect to ineligibility for treatment or pension on the ground that the disability from which the man may be suffering is not attributable to service.

The development and activities of the Department of Soldiers' Civil Re-establishment have been set forth at length in previous issues of the Year Book. (See especially the 1920 Year Book, pp. 21-40). The rates of pension and certain statistics regarding pensions have also appeared. (See 1922-23 Year Book, pp. 935-937).

The work of the Department of Soldiers' Civil Re-establishment reached its peak in 1920, when the total number of employees, apart from those employed by the Board of Pension Commissioners, was 8,791. The staff of the Board of Pension Commissioners at that time was upwards of 1,000. In 1921 the two staffs were amalgamated, with the exception of a small number of doctors and assistants who were attached to the Board. The number of employees on Dec. 31, 1924, was 2,524, a large majority of whom had seen service in France.

The Department is operating nine hospitals, with a total bed capacity of 2,647. It is also utilizing a large number of civilian general-treatment hospitals, tuberculosis sanatoria and mental institutions. The number of soldier in-patients at Dec. 31, 1924, was 3,347. This is a reduction of 272 from the previous year, but the numbers are now becoming much more constant, as a majority of the transient cases have been dealt with already.

At the session of Parliament in 1924, two amendments were made to the Department of Soldiers' Civil Re-establishment Act, one dealing with the classification and control of the staff, and the other empowering the Department to receive and hold moneys belonging to ex-members of the forces who have received treatment, particularly those suffering from mental diseases.

The Department is continuing to assume responsibility for workmen's compensation in the case of pensioners of 20 p.c. and upwards; this provision is assisting materially in the placement of disabled men in industry, as not only are the premiums paid to the various Workmen's Compensation Boards returnable to the employers, but the Department reimburses these Boards the amount of compensation payable, less any premiums returned.

A measure of relief to pensioners has been continued by the Department. The method adopted is to issue orders on grocers, landlords, coal-dealers, etc. Such expenditure during the calendar year 1924 was \$336,966. Relief was granted to 33,642 men.

The Department is operating "sheltered employment" workshops at Halifax, St. John, Montreal, Toronto, Hamilton, London, Kingston, Winnipeg, Vancouver and Victoria. On Dec. 31, 1924, 346 men were employed in these workshops.

During 1924, an experiment was carried on at Toronto looking towards the permanent placement in industry of disabled men whom it has not been possible previously to re-establish. A committee of prominent business and professional men approached the Government with a definite proposal and the plan outlined was approved. Since the commencement of the work in May, 162 men have been placed.

Authority was granted to the Department by Order in Council in September, 1924, to provide quarters and maintenance for indigent pensioners. An increasing number of men have been found, who, through advancing age and the development of disabilities in civilian life, super-imposed on service disabilities, are unable to secure or to hold ordinary employment. Under the authority named, certain sections of departmental hospitals have been set aside for present and early future requirements.

In May and July, 1924, the third and final reports of the Royal Commission on Pensions and Re-establishment were completed. These reports cover matters not previously dealt with by that Commission, and make certain recommendations as to changes in or additions to present procedure. They deal at length with the subjects of amendments to the Pension Act, employment of handicapped men, the needs of the disabled soldier with a small pension or no pension, the care, treatment and pensionability of men who suffer from disabilities such as amputation, tuberculosis, insanity, etc., improvements in general procedure, care of Canadians and Imperials in the United States, the disposal of the canteen funds and other matters.

The total expenditure by the Department for the year ended March 31, 1924, was \$51,541,825, divided as follows:

Direct payments to men and dependants in cash, consisting of pensions, pay and allowances, relief, etc.....	\$ 41,570,222
Payments for services to men and dependants, including hospital treatment, orthopaedic appliances, transportation of patients and pensioners, funeral expenses and sheltered employment under the control of Department, and employers' liability compensation.	5,648,188
Payments to outside organizations not under the direct control of the Department, such as the Last Post Fund, Canadian Red Cross for sheltered employment, Royal Commission on Pensions and Re-establishment and Federal Appeal Board.....	238,426
Capital expenditure.....	6,121
Recoverable expenditure and casual revenue...	1,593,223
Total payments apart from administration.....	\$ 49,056,180
Administration, including salaries, telephones, telegrams, transportation, stationery, rent, light, heat, etc.....	2,485,645
Total.....	\$ 51,541,825

The cost of administration in respect of the above expenditure and of the collection of premiums under the Returned Soldiers' Insurance Act was 4.863 p.c.

Returned Soldiers' Insurance—The Returned Soldiers' Insurance Act of 1920 (10-11 George V, c. 54) was placed under the jurisdiction of the Board of Pension Commissioners for Canada. The Board confines itself, however, to supervision and adjudication on claims. All collections and payments are made by the Department. No applications under the statute were received after Sept. 1, 1923. The total number of policies in force on Dec. 31, 1924, was 27,666, representing an insurance of \$61,404,500. During the calendar year, the premium income was \$1,742,236. Expenditure during the year in respect of death claims, cancelled insurance and surrendered policies amounted to \$545,045. The total amount of death claims from the beginning has been \$2,940,500. The balance in hand as at Dec. 31, 1924, apart from interest from April 1 to Dec. 31, was \$2,893,847.

Board of Pension Commissioners—As a result of recommendations made in the third report (Second Interim Report on Second Part of Investigation) of the Royal Commission, certain amendments were made in the Pension Act during the session of 1924. The principal of these provided for the insertion of a workable meritorious clause, for the renewal of a pension to a woman whose pension has been discontinued through remarriage, if her second husband dies within five years and leaves her in a dependent condition, and the extension of the right of appeal to the Federal Appeal Board to two years from the date of appointment of the Board, instead of one year as previously enacted.

The following figures are as at March 31, 1924:

Total number of disability pensions, temporary.....	30,485
Total number of disability pensions, permanent.....	12,815
Total.....	43,300

Total number of dependent pensioners:

Widows.....	8,013
Others.....	11,958
Total.....	19,971

Number of persons in receipt of pensions under the Pension Act:

Disability pensioners.....	43,300
" pensioners' wives.....	28,872
" " children.....	42,576
" " other relatives.....	855
Dependent pensioners.....	19,971
" pensioners' children.....	12,073
Other relatives in addition to main dependant.....	2,102
Total.....	149,749

Yearly liability in respect of aforesaid pensioners.....\$ 30,825,049

Brief statistics are appended to illustrate the growth of the activities of the Board of Pension Commissioners. The total number of pensions in force increased from 25,823 to 63,271 during the fiscal years 1918 to 1924 and the total liability

from \$7,273,728, or an average of \$282 per pension, to \$30,825,049, or an average of \$487 per pension. While pensions paid to dependants during the six-year period practically doubled in number, those paid on account of disabilities showed an increase of nearly threefold. Liability under dependants' pensions during the same period showed a threefold increase, while disabilities' pensions had increased in 1924 to practically six times their 1918 total, a comparatively greater rate of increase than that shown in the case of pensions paid to dependants. It will be noticed that, following the increase of pensions' liability to a total of \$31,184,838 at the close of the fiscal year 1921, a decrease of some \$360,000 is shown down to the close of the fiscal year 1923.

PENSIONS IN FORCE AS AT MAR. 31, 1918-1924.

Years.	Dependants.		Disabilities.		Total.	
	No. of Pensions.	Liability.	No. of Pensions.	Liability.	No. of Pensions.	Liability.
		\$		\$		\$
1918.....	10,488	4,168,602	15,335	3,105,126	25,823	7,273,728
1919.....	16,753	9,593,056	42,932	7,470,729	59,685	17,063,785
1920.....	17,823	10,841,170	69,203	14,335,118	87,026	25,176,288
1921.....	19,209	12,954,141	51,452	18,230,697	70,661	31,184,838
1922.....	19,606	12,687,237	45,133	17,991,535	64,739	30,678,772
1923.....	19,794	12,279,621	43,263	18,142,145	63,057	30,421,766
1924.....	19,971	12,037,843	43,300	18,787,206	63,271	30,825,049

VI.—MISCELLANEOUS ADMINISTRATION.

1.—The Soldier Settlement Board.

The Canada Year Book, 1921, contains, on pages 809 and 810, a statement regarding the establishment and early proceedings of the Soldier Settlement Board.

At the end of the calendar year 1924, the number of returned men placed on farms by the Soldier Settlement Board was 30,604. Of these, 24,148 have been granted loans amounting to \$103,150,099, and the remainder are on free soldier grants without loans. The moneys were disbursed for the following purposes:

For the purchase of land.....	\$ 59,800,229
For removal of encumbrances on land owned privately by settlers.....	2,559,260
For permanent improvements.....	10,608,980
For stock and equipment.....	29,782,431
Disbursed to Indian settlers through Indian Department	399,199

Total.....\$ 103,150,099

Since the spring of 1924 new applications have been limited to the following classes:

1. Soldier settlers who apply to purchase farms already owned by the Board.
2. Those who are owners of land upon which they could have applied for a loan but had not done so, loans in such cases to be limited under section 25 of the Soldier Settlement Act to 50 p.c. of the value of the land for removal of encumbrances and a total of \$5,000 for all purposes.

3. Those to whom the Board was committed by reason of the fact that they had been recommended for training, or otherwise had an equitable claim to be dealt with, but no new applicants to be accepted for training or qualification.

Moneys have been returned to the Treasury on account of loans for settlement amounting to \$19,399,800. These moneys include initial payments and repayments of principal and interest. Seven hundred and twenty-seven soldier settlers have repaid their loans in full, 336 discontinuing farming and 391 remaining on the land.

The abandonments number 21 p.c. of those receiving loans. The Board has disposed of a number of these abandoned farms, leaving 13.8 p.c. still to be disposed of.

In August, 1923, the Soldier Settlement Board was transferred by Order in Council from the Minister of the Interior and placed under the Minister of Immigration and Colonization; it has become the Land Settlement Branch of that Department. In this way the Department is able to offer a land settlement service to newcomers; the inexperienced immigrant has thus a disinterested source of advice on farming districts and land values which will afford him a means of protection against unfair exploitation and his own ignorance of local conditions. The Branch gives the benefit of its knowledge and experience to those coming to Canada from Great Britain and the United States with directing certificates from immigration authorities. During 1924, 2,728 directing certificates were issued to such settlers. Further, 5,640 newcomers, desiring to work with farmers to gain experience with a view to taking up farms of their own, were directed to farm work by the Branch during the year.

2.—Department of the Secretary of State.

The Department of the Secretary of State was constituted in its present form in 1873, through the merging of the previously-existing offices of the Secretaries of State for Canada and for the Provinces. The Secretary of State is the official mouthpiece of the Governor-General, as well as the medium of communication between the Dominion and Provincial Governments, all correspondence between the two being conducted by him with the Lieutenant-Governors. He is also the custodian of the Great Seal of Canada and the Privy Seal, as well as the channel by which the general public may approach the Crown.

The Secretary of State is also the Registrar-General, registering all proclamations, commissions, charters, land patents and other instruments issued under the Great Seal. He is further charged with the administration of the Companies Act, the Canada Temperance Act, the Naturalization Act, the Board of Trade and Trade Unions Acts, the Ticket of Leave Act and the War Charities Act. The following information on these subjects has been secured in the course of administration.

Charters of Incorporation.—The number of companies incorporated under the Companies Act and amending Acts during the fiscal year 1923-24 was 604, with a total capitalization of \$204,646,283. Supplementary letters patent were granted to 168 companies during the year, 58 of which increased their capital stock by the aggregate amount of \$15,352,755; 27 decreased their capital stock by \$57,944,410; the remaining 83 being granted supplementary letters patent for various purposes, such as changing names, extending powers, etc. The total capitalization of new companies plus the increase of capital of existing companies amounted to \$219,999,038.

In Table 17 will be found the number and capitalization of companies incorporated during the years 1900-1924.

17.—Number of Companies Incorporated under the Companies Act and amending Acts during the calendar years 1900-1907, and for the fiscal years ended March 31, 1908-1924.

Years.	New Companies.		Old Companies.		Gross Increase in Capitalization.	Old Companies.		Net Increase of Capitalization.
	Number.	Capitalization.	Number.	Increase in Capital.		Number.	Decrease in Capital.	
		\$		\$	\$		\$	\$
1900.....	53	9,558,900	-	3,351,000	12,909,900	-	-	12,909,900
1901.....	55	7,662,552	-	3,420,000	11,082,552	-	-	11,082,552
1902.....	126	51,182,850	-	5,055,000	56,237,850	-	-	56,237,850
1903.....	187	83,405,340	-	5,854,520	89,259,860	-	-	89,259,860
1904.....	206	80,597,752	-	3,366,000	83,963,752	-	-	83,963,752
1905.....	293	99,910,900	-	9,685,000	109,595,900	-	-	109,595,900
1906.....	374	180,173,075	-	32,403,000	212,576,075	-	-	212,576,075
1907.....	378	132,686,300	-	19,091,900	151,778,200	-	-	151,778,200
1908 (3 mos.)	64	13,299,000	-	865,000	14,164,000	-	-	14,164,000
1909.....	366	121,624,875	-	72,293,000	193,917,875	-	-	193,917,875
1910.....	420	301,788,300	44	46,589,500	348,377,800	4	670,600	347,707,200
1911.....	454	458,415,800	45	24,715,600	483,131,400	4	10,650,000	472,481,400
1912.....	575	447,626,999	44	42,939,000	490,565,999	7	17,880,800	472,685,199
1913.....	835	625,212,300	54	55,549,900	680,762,200	5	11,861,381	669,900,819
1914.....	647	361,708,567	61	63,599,003	425,307,570	3	3,290,000	422,017,570
1915.....	461	208,283,633	34	26,650,000	234,933,633	4	6,840,000	228,093,633
1916.....	534	157,342,800	28	68,996,000	226,338,800	11	4,811,700	221,527,100
1917.....	606	207,967,810	36	26,540,000	234,507,810	3	5,050,000	229,457,810
1918.....	574	335,982,400	41	69,321,400	405,303,800	4	1,884,300	403,419,500
1919.....	512	214,326,000	69	67,583,625	281,909,625	11	2,115,985	279,793,640
1920.....	991	603,210,850	88	85,187,750	688,398,600	10	19,530,000	668,868,600
1921.....	852	752,062,683	135	79,803,000	831,865,683	17	7,698,300	824,167,383
1922.....	875	351,555,900	43	18,275,000	369,830,900	13	5,121,450	364,709,450
1923.....	752	314,603,050	45	46,108,500	360,711,550	30	10,751,123	349,960,427
1924.....	604	204,646,283	58	15,352,755	219,999,038	27	57,944,410	162,054,628

Naturalizations.—The naturalizations effected under the Naturalization Act (R.S. 1906, c. 77) for the calendar years 1908-1917 inclusive, were given on page 594 of the Year Book for 1919. Since January 1, 1918, the only method of obtaining naturalization has been under what is known as the "Imperial" Naturalization Act, which came into force on January 1, 1915. This Act was known under the title of the Naturalization Act, 1914, until July 7, 1919, when it was repealed and the Naturalization Act, 1919, came into force. On July 1, 1920, the Naturalization Act, 1919, was repealed, and the Naturalization Act, 1914, was revived and amended under the title of the Naturalization Acts, 1914 and 1920. This latter Act is the one now in force. By an amendment passed by Parliament in 1923, the restriction by which persons of alien enemy birth were ineligible to receive certificates of naturalization for a period of ten years after the termination of the war was removed, and at the present time any alien may apply for naturalization, regardless of his nationality.

Table 18 shows the number of persons, by nationalities, granted naturalization under these Acts during the calendar years from 1916 to 1923.

18.—Naturalizations in Canada, by Principal Nationalities, effected under the Naturalization Acts, 1914, and 1920, during the calendar years 1916-23.

Nationalities.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.
Albanians.....	—	—	—	—	1	3	4	5
Americans.....	63	58	11	37	3,553	2,521	1,600	989
Arabians.....	—	—	—	—	1	—	1	—
Argentinians.....	—	—	—	1	—	1	2	1
Austrians.....	—	—	—	—	15	182	89	606
Austro-Hungarians.....	—	—	—	—	3	25	5	10
Austrians (Ukrainians).....	—	—	—	—	—	—	2	—
Belgians.....	1	1	8	65	102	137	132	129
Bohemians.....	—	—	—	2	—	—	—	—
Bolivians.....	—	—	—	—	—	—	1	—
Brazilians.....	—	—	—	—	2	2	5	4
British in Canada.....	—	—	—	3	—	—	—	—
Bulgarians.....	—	—	—	—	3	5	3	32
Chilians.....	—	—	—	—	—	—	1	—
Chinese.....	5	4	2	21	20	25	14	10
Czecho-Slovaks.....	—	—	—	1	102	145	99	64
Danes.....	3	12	16	115	133	171	125	93
Dutch.....	6	4	18	80	99	94	65	51
Dutch East Indians.....	—	—	1	—	—	—	—	—
Egyptians.....	—	—	—	—	—	—	2	1
Finns.....	—	—	—	17	111	152	115	74
French.....	5	3	7	128	127	158	124	96
Germans.....	—	—	1	—	112	257	195	144
Germans (Alsace-Lorraine).....	—	—	—	—	1	—	—	—
Greeks.....	6	—	4	30	161	224	260	268
Greeks (Turk).....	—	—	—	—	—	—	1	—
Hungarians.....	—	1	—	—	7	28	31	24
Italians.....	3	1	5	156	181	432	665	856
Japanese.....	17	31	15	82	125	135	95	29
Jugo-Slavs.....	—	—	—	—	3	2	—	—
Luxembourgers.....	—	—	1	1	6	7	3	5
Mexicans.....	—	—	—	—	—	—	—	1
Montenegrins.....	1	—	—	1	4	4	—	1
Nationality Undetermined.....	—	—	—	—	—	1	—	—
No Nationality.....	—	—	—	2	1	3	1	3
Norwegians.....	11	4	34	210	366	301	209	151
Palestinians.....	—	—	—	—	—	—	7	5
Persians.....	—	—	—	—	3	4	—	1
Poles.....	—	—	—	58	1,194	1,939	1,088	654
Poles (Russian).....	—	—	—	—	—	3	—	—
Poles (Ukrainian).....	—	—	—	—	7	287	302	12
Portuguese.....	—	—	—	1	—	—	1	—
Re-Admission.....	—	—	4	4	—	—	—	—
Rumanians.....	3	2	6	55	384	873	585	475
Russians.....	6	5	9	687	1,303	2,027	1,715	1,206
Serb-Croat-Slovenes.....	—	—	—	—	22	123	99	80
Serbians.....	—	—	—	3	24	4	3	—
Spaniards.....	—	—	3	4	5	3	8	5
Subjects of Allied Powers.....	—	—	—	—	28	77	120	188
Swedes.....	14	8	37	236	384	437	276	226
Swiss.....	10	1	10	39	51	69	49	43
Turks.....	—	—	—	—	2	10	7	8
Turks (Armenian).....	—	—	—	1	39	67	86	79
Turks (Assyrian).....	—	—	—	—	—	3	1	—
Turks (Greek).....	—	—	—	—	3	15	7	7
Turks (Macedonian).....	—	—	—	—	—	1	—	—
Turks (Mesopotamian).....	—	—	—	—	4	2	5	2
Turks (Palestinian).....	—	—	—	—	1	1	—	—
Turks (Syrian).....	—	—	—	11	79	134	136	125
Venezuelans.....	—	1	—	—	—	—	—	1
Section 4 ¹	2	—	—	—	2	3	—	1
Section II s.s. (c) Ch. 38, Nat. Act, 1919 ²	—	—	—	—	2	—	—	—
Total.	156	135	195	2,051	8,776	11,098	8,344	6,795

¹Under Section 4 of the Naturalization Act, 1914, the Secretary of State is authorized in his discretion to grant a special certificate of naturalization to any person with regard to whose nationality as a British subject a doubt exists.

²Resumption of British nationality by wife of alien being a subject of state at war with His Majesty.

Canada Temperance Act.—Under Parts I and II of this Act, provision is made for the prohibition of the sale of intoxicating liquors in counties and cities. On July 31, 1923, a vote was taken upon the repeal of the Act in the county of Stanstead, Quebec. The repeal was carried by a large majority and became effective from Sept. 22, 1923. Part IV of the Act relates to the prohibition of the importation and exportation of intoxicating liquors into and from the provinces. Seven provinces have carried plebiscites in favour of the prohibition of importation and the prohibition remains in force in all these provinces. Exportation is prohibited from the provinces of New Brunswick, Prince Edward Island, Manitoba, Alberta and Saskatchewan.

3.—Royal Canadian Mounted Police.

The Royal Canadian Mounted Police (formerly the Royal Northwest Mounted Police) are distributed throughout the Dominion, with headquarters at Ottawa. The operations of the force for the year ended September 30, 1923, are described in the Commissioner's Report for that year, which shows that during the year the Royal Canadian Mounted Police discharged numerous and varied functions, in several instances assisting provincial administrations in the maintenance of law and order, co-operating with the Dominion Department of Health in putting down the illicit traffic in narcotics, with the Secretary of State in inquiring into the suitability for citizenship of applicants for naturalization, with the Department of Marine and Fisheries in protecting property in cases of wrecks and in enforcing fisheries regulations, with the Post Office Department in tracking down mail robbers, with the Dominion Bureau of Statistics in the taking of the census in outlying communities, and with the Department of Indian Affairs in the enforcement of the Indian Act, while important patrol work has been done in the Arctic regions. On September 30, 1923, the strength of the force was 58 officers, 1,090 non-commissioned officers and constables, 543 horses and 128 dogs.

19.—Strength and Distribution of the Royal Canadian Mounted Police on September 30, 1923.

Schedule.	Headquarters Staff.	Maritime Provinces.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.	Northwest Territories.	Baffin Island.	Ellesmere Island.	Canada.
Commissioners.....	1	—	—	—	—	—	—	—	—	—	—	—	1
Asst. Commissioners.....	1	—	—	—	—	—	—	—	—	—	—	—	2
Superintendents.....	2	—	—	2	1	4	2	—	—	—	—	—	11
Inspectors.....	2	—	1	5	3	7	8	7	3	3	—	—	41
Surgeons.....	1	—	—	—	—	1	—	—	—	—	—	—	2
Asst. Veterinary Surgeons.....	1	—	—	—	—	1	—	—	—	—	—	—	1
Staff Sergeants.....	9	1	1	8	4	9	7	7	4	—	1	—	51
Sergeants.....	11	3	6	26	9	33	18	16	12	1	—	—	125
Corporals.....	11	3	7	25	13	38	27	26	7	7	1	—	167
Constables.....	20	23	16	235	33	148	73	74	22	15	2	6	667
Special Constables.....	14	1	—	16	1	12	17	12	4	3	—	—	80
Total Personnel.....	72	32	31	317	64	253	152	143	42	29	4	9	1,148
Saddle horses.....	—	—	—	59	26	192	108	91	—	—	—	—	476
Team horses.....	—	—	—	4	—	24	4	10	—	—	—	—	66
Ponies.....	—	—	—	—	—	—	1	—	—	—	—	—	1
Total Horses.....	—	—	—	63	26	216	133	95	10	—	—	—	543
Dogs.....	—	—	8	11	21	—	11	—	15	62	—	—	128

4.—Judicial and Penitentiary Statistics.

The collection and publication of criminal statistics was first authorized by an Act of 1876 (39 Vict., c. 13), and the results have been published upon a comparable basis in an annual report from that time to the present and are now collected and published by the Dominion Bureau of Statistics under the Statistics Act (8-9 Geo. V, c. 43), which provides for the receipt of an annual return by the Bureau from every court or tribunal administering criminal justice. The statistics as published show for each judicial district (155 in number) the offences that have been committed, analysed to indicate the nature of the offence, the age, sex, occupation and social condition, birthplace, etc., of the convicted, and the sentences imposed. The Act also provides for the collection of the statistics of penitentiaries, prisons, reformatories and jails, as complementary to the preceding.

1.—General Tables.

The statistics relate to years ending September 30, the latest report being for 1923. Beginning with the report for 1922, an enlargement of the classification of offences has been adopted, by which offences of juvenile offenders are compiled separately from those of adults. The term "indictable" applies to offences of adults only, similar offences committed by juveniles being termed "major" offences; similarly, "non-indictable" offences of adults are termed "minor" offences when attributed to juveniles. All current tables have been worked out for 1921 and subsequent years in accordance with the new classification, but a comparative historical table, giving the totals for different classes of criminal offences and minor offences, including juvenile delinquents, from 1876 to 1923, is here published (Table 20), together with a more detailed table for recent years (Table 21). In the consideration of the former it should be remembered that while the criminal code undergoes little change over periods of time, the figures of summary convictions depend very much upon the changes in the customs of the people, and are apt to increase with the increasing urbanization of the population. The most significant column of Table 20 is the figure of criminal offences per 100,000 of population. Attention may be drawn to the substantial decline in the proportion of both criminal offences and minor offences to population in the past two years, convictions for criminal offences having declined from 284 per 100,000 population in 1921 to 266 per 100,000 population in 1923, and convictions for minor offences from 1,731 per 100,000 in 1921 to 1,487 per 100,000 in 1923.

It should be understood that the classification of offences in these general tables, 20 and 21, is irrespective of the more technical classification into "indictable" and "non-indictable" offences under the Criminal Code. The object here is to show a broad historical record of criminal and minor offences respectively.

20.—Convictions by Groups of Criminal Offences, and Total Convictions for Minor Offences, 1876-1923, with Proportion to Population.

Years.	Criminal Offences.				Minor Offences.						Total Criminal and Minor Offences.
	Offences against			Other felonies and misdemeanours.	Total of Criminal Offences.			Total Minor Offences.			
	the person.	property with violence.	property without violence.								
	No.	No.	No.		No.	No.	p.c. of all offences.	per 100,000 pop.	No.	p.c. of all offences.	
1876...	4,959	201	2,870	121	8,151	28.9	206	20,064	71.1	508	28,215
1877...	5,253	229	3,316	114	8,912	29.4	222	21,388	70.6	533	30,300
1878...	5,376	222	3,612	129	9,339	28.3	229	23,666	71.7	580	33,005
1879...	4,815	238	3,043	75	8,168	28.4	197	20,568	71.6	496	28,736
1880...	5,694	176	3,018	202	9,090	32.2	215	19,119	67.8	454	28,209
1881...	4,353	144	2,593	288	7,378	25.2	170	21,847	74.8	504	29,225
1882...	4,667	173	2,845	106	7,791	24.9	178	23,514	75.1	536	31,305
1883...	4,868	132	2,587	128	7,715	22.9	174	25,857	77.1	583	33,572
1884...	4,288	228	3,547	167	8,230	27.6	183	21,593	72.4	481	29,793
1885...	5,057	222	3,157	289	8,725	25.6	192	25,317	74.4	558	34,042
1886...	5,202	255	2,943	224	8,624	25.2	188	25,581	74.8	557	34,205
1887...	4,902	208	2,519	224	7,873	22.7	170	26,772	77.3	577	34,645
1888...	4,790	225	3,442	162	8,619	22.8	184	29,173	77.2	622	37,792
1889...	5,284	283	3,456	164	9,187	23.8	194	29,421	76.2	621	38,608
1890...	5,093	276	3,267	164	8,800	22.7	184	29,906	77.3	624	38,706
1891...	4,788	283	3,369	160	8,600	22.9	178	29,017	77.1	599	37,617
1892...	4,903	251	3,232	173	8,559	24.3	173	26,734	75.7	547	35,293
1893...	4,689	362	3,574	181	8,806	24.7	178	26,847	75.3	544	35,653
1894...	4,599	450	4,155	200	9,404	26.0	189	26,761	74.0	537	36,165
1895...	4,652	462	4,199	295	9,608	25.6	191	27,977	74.4	556	37,585
1896...	4,544	408	4,104	301	9,357	25.1	184	27,921	74.9	549	37,278
1897...	4,418	475	4,431	409	9,733	25.6	189	28,245	74.4	550	37,978
1898...	4,594	549	4,504	335	10,063	26.3	193	28,143	73.7	514	38,206
1899...	4,227	444	4,541	339	9,551	24.7	181	29,159	75.3	554	38,710
1900...	4,598	413	4,571	411	9,993	24.0	188	31,661	76.0	595	41,654
1901...	4,698	451	4,441	384	9,974	23.7	184	32,174	76.3	596	42,148
1902...	4,773	413	4,541	363	10,096	23.1	182	33,446	76.9	605	43,536
1903...	5,480	543	4,944	505	11,472	22.8	202	38,911	77.2	686	50,383
1904...	5,919	552	5,295	528	12,294	22.4	211	42,652	77.6	732	54,946
1905...	5,694	656	5,711	812	12,873	20.6	215	49,686	79.4	829	62,559
1906...	6,215	645	6,425	1,078	14,363	20.3	233	56,540	79.7	916	70,903
1907...	6,651	681	6,907	807	15,046	19.0	239	64,124	81.0	1,017	79,170
1908...	7,371	893	7,973	1,060	17,314	19.5	266	71,322	80.5	1,099	88,634
1909...	6,586	848	7,771	1,332	16,537	18.4	247	73,415	81.6	1,096	89,952
1910...	7,793	943	8,191	1,131	18,058	17.5	268	84,845	82.5	1,227	102,903
1911...	8,352	977	9,024	1,194	19,547	17.3	273	93,713	82.7	1,309	113,260
1912...	9,371	1,195	10,626	1,540	22,736	15.5	309	123,795	84.5	1,686	146,527
1913...	11,444	1,472	12,721	1,724	27,361	15.8	363	145,777	84.2	1,936	173,138
1914...	12,136	1,810	14,645	1,952	30,547	16.7	377	152,492	83.3	1,982	183,035
1915...	10,664	2,234	14,269	1,525	28,692	18.7	373	124,363	81.3	1,619	153,055
1916...	9,327	1,478	11,018	1,459	23,282	18.8	289	100,509	81.2	1,251	123,791
1917...	6,852	1,321	9,886	1,271	19,330	16.9	236	94,681	83.1	1,157	114,011
1918...	7,242	2,049	10,743	1,390	21,474	17.4	258	101,795	82.6	1,222	123,269
1919...	7,731	2,676	11,508	1,656	23,591	18.1	277	106,518	81.9	1,256	130,019
1920...	8,281	2,310	11,634	2,059	24,284	14.9	281	138,424	85.1	1,604	162,708
1921...	8,197	2,609	12,059	2,081	24,946	14.2	284	152,227	85.9	1,731	177,173
1922...	7,291	2,783	11,697	2,610	24,291	15.3	271	134,049	84.7	1,498	155,340
1923...	7,550	2,076	11,482	3,075	24,183	15.1	266	135,069	84.9	1,487	159,252

21.—Indictable and Summary Convictions by Classes of Offence, 1919-23, (including Juveniles).

A.—NUMBERS.

Classes of Offence.	1919.	1920.	1921.	1922.	1923.
	No.	No.	No.	No.	No.
Offences against the person.....	7,731	8,281	8,197	7,291	7,550
Offences against property with violence.....	2,606	2,310	2,609	2,783	2,076
Offences against property without violence.....	11,508	11,634	12,059	11,607	11,482
Other felonies and misdemeanours.....	1,656	2,059	2,081	2,610	3,075
Total for criminal offences.....	23,501	24,284	24,946	24,291	24,183
Breach of Municipal Acts and By-laws.....	39,593	59,378	74,459	69,207	69,445
Breach of liquor laws.....	7,383	10,247	10,460	8,519	10,090
Drunkenness.....	24,217	39,769	34,362	25,051	25,565
Vagrancy.....	4,097	5,607	5,561	4,796	3,969
Loose, idle and disorderly.....	2,496	2,134	5,560	5,468	5,026
Keeping bawdy houses and inmates thereof.....	5,567	3,821	4,051	3,918	4,438
Miscellaneous minor offences.....	23,166	17,468	17,774	17,000	16,536
Total for minor offences.....	106,519	138,424	152,227	134,049	135,069
Grand Total.....	130,020	162,708	177,173	158,340	159,252

B.—RATIOS PER CENT OF TOTAL AND PER 100,000 OF POPULATION.

Classes of Offence.	1919.		1920.		1921.		1922.		1923.	
	Per cent.	Per 100,000 pop.	Per cent.	Per 100,000 pop.	Per cent.	Per 100,000 pop.	Per cent.	Per 100,000 pop.	Per cent.	Per 100,000 pop.
Offences against the person.....	6.0	91	5.1	96	4.6	93	4.6	81	4.7	83
Offences against property with violence.....	2.0	31	1.4	27	1.5	30	1.7	31	1.3	23
Offences against property without violence.....	8.8	136	7.1	135	6.8	137	7.3	130	7.2	126
Other felonies and misdemeanours.....	1.3	19	1.3	23	1.2	24	1.7	29	2.0	34
Total for criminal offences.....	18.1	277	14.9	281	14.1	284	15.3	271	15.2	266
Breach of Municipal Acts and By-laws.....	30.5	467	36.5	688	42.1	847	43.8	775	43.6	765
Breach of liquor laws.....	5.7	87	6.3	119	5.9	119	5.4	95	6.3	111
Drunkenness.....	18.6	286	24.4	461	19.4	391	15.8	282	16.0	281
Vagrancy.....	3.1	49	3.4	65	3.1	63	3.0	53	2.5	44
Loose, idle and disorderly.....	1.9	29	1.3	25	3.1	63	3.5	61	3.1	55
Keeping bawdy houses and inmates thereof.....	4.3	66	2.3	44	2.3	46	2.5	44	2.8	49
Miscellaneous minor offences.....	17.8	272	10.9	202	10.0	202	10.7	190	10.4	182
Total for minor offences.....	81.9	1,256	85.1	1,604	85.9	1,731	84.7	1,500	84.7	1,487
Grand Total.....	100	1,533	100	1,885	100	2,015	100	1,771	100	1,753

The recent trend of total convictions, including those of juveniles, and of sentences imposed, is shown by provinces for the years 1917 to 1923 in Table 22. A satisfactory feature shown in this table is the decline of penitentiary sentences in Canada from 1,614 in 1921 to 1,174 in 1923, as indicating a decline in the number of serious crimes. Death sentences, which numbered 28 in 1919 and 26 in 1920, fell to 15 in 1923.

22.—Convictions and Sentences for all Offences, by Provinces, 1917-1923.

Provinces.	1917.	1918.	1919.	1920.	1921.	1922.	1923.
	No.	No.	No.	No.	No.	No.	No.
Canada—							
Convictions.....	114,011	123,269	130,019	162,708	177,173	158,340	159,252 ¹
Sentences—							
Penitentiary.....	686	890	1,214	1,125	1,614	1,599	1,174
Gaol or fine.....	92,402	99,899	105,747	135,288	146,278	126,621	147,919
Reformatory.....	584	678	678	615	502	519	531
Death.....	15	20	28	26	17	19	15
Other sentences.....	20,324	21,782	22,352	25,654	28,762	29,582	9,613
Prince Edward Island—							
Convictions.....	356	246	267	359	397	341	344
Sentences—							
Penitentiary.....	5	2	2	1	3	4	1
Gaol or fine.....	338	198	240	342	383	327	328
Reformatory.....	2	7	6	—	1	1	—
Death.....	—	—	—	—	—	—	—
Other sentences.....	11	39	19	16	10	9	15
Nova Scotia—							
Convictions.....	5,282	5,511	6,300	6,503	5,572	4,279	3,762
Sentences—							
Penitentiary.....	45	105	108	122	137	165	99
Gaol or fine.....	4,533	4,682	5,471	5,818	4,708	3,511	3,258
Reformatory.....	49	47	44	38	42	33	82
Death.....	2	2	—	—	1	2	—
Other sentences.....	653	675	677	525	684	568	323
New Brunswick—							
Convictions.....	2,896	1,945	2,780	3,839	3,070	2,655	2,387
Sentences—							
Penitentiary.....	25	17	53	77	83	106	36
Gaol or fine.....	2,598	1,688	2,477	3,531	2,749	2,371	2,252
Reformatory.....	27	16	21	19	20	11	12
Death.....	—	—	1	—	—	1	—
Other sentences.....	246	224	228	212	218	166	87
Quebec—							
Convictions.....	25,936	29,121	34,801	44,089	49,106	35,605	31,710
Sentences—							
Penitentiary.....	185	192	355	258	274	312	252
Gaol or fine.....	20,205	23,231	28,135	36,835	42,777	28,807	29,645
Reformatory.....	155	152	185	241	110	134	91
Death.....	2	4	7	7	3	4	2
Other sentences.....	5,389	5,542	6,119	6,748	5,942	6,348	1,720
Ontario—							
Convictions.....	49,579	54,761	53,215	63,463	74,127	72,787	74,207
Sentences—							
Penitentiary.....	216	343	389	404	659	559	417
Gaol or fine.....	39,366	42,745	41,211	49,677	57,070	55,599	68,846
Reformatory.....	289	352	323	252	245	218	218
Death.....	4	4	8	11	6	6	4
Other sentences.....	9,704	11,317	11,284	13,119	16,147	16,405	4,722
Manitoba—							
Convictions.....	8,155	8,662	9,514	12,516	11,610	11,840	13,547
Sentences—							
Penitentiary.....	55	59	87	76	144	171	110
Gaol or fine.....	6,626	6,538	7,387	9,949	8,520	8,737	12,239
Reformatory.....	31	59	64	39	65	54	72
Death.....	4	5	—	1	—	1	—
Other sentences.....	1,439	2,001	1,976	2,451	2,881	2,877	1,126
Saskatchewan—							
Convictions.....	7,072	7,635	7,315	7,991	7,384	8,504	10,069
Sentences—							
Penitentiary.....	36	64	63	40	53	54	57
Gaol or fine.....	6,533	7,010	6,636	7,251	6,624	7,501	9,579
Reformatory.....	—	5	—	—	—	23	15
Death.....	—	3	8	4	2	—	3
Other sentences.....	503	553	608	696	705	926	415

¹ The 1923 totals for Canada include 5 convictions and various sentences for offences committed in the Northwest Territories.

22.—Convictions and Sentences for all Offences, by Provinces, 1917-1923—concluded.

Provinces.	1917.	1918.	1919.	1920.	1921.	1922.	1923.
	No.	No.	No.	No.	No.	No.	No.
Alberta—							
Convictions.....	6,627	7,633	7,001	8,459	9,847	9,201	10,067
Sentences—							
Penitentiary.....	56	65	76	67	67	99	77
Gaol or fine.....	6,124	7,206	6,401	7,756	8,809	7,907	9,384
Reformatory.....	1	2	1	4	4	19	10
Death.....	1	1	3	3	2	2	4
Other sentences.....	445	359	520	629	965	1,174	592
British Columbia—							
Convictions.....	8,002	7,680	8,789	15,434	16,020	13,066	13,115
Sentences—							
Penitentiary.....	57	43	81	80	194	129	123
Gaol or fine.....	6,004	6,536	7,768	14,084	14,617	11,822	12,849
Reformatory.....	30	38	34	22	15	26	31
Death.....	1	1	1	—	3	3	—
Other sentences.....	1,910	1,062	905	1,248	1,191	1,086	612
Yukon Territory—							
Convictions.....	106	75	37	55	40	62	39
Sentences—							
Penitentiary.....	6	—	—	—	—	—	—
Gaol or fine.....	75	66	21	45	21	39	38
Reformatory.....	1	—	—	—	—	—	—
Death.....	1	—	—	—	—	—	—
Other sentences.....	24	9	16	10	19	23	1

2.—Indictable Offences.

In Table 23 are shown, by provinces, the number of charges and convictions for "indictable" offences for the years ended Sept. 30, 1921, 1922 and 1923. The number of charges declined from 21,451 in 1921 to 21,032 in 1922 and 19,759 in 1923, and the number of convictions from 16,169 in 1921 to 15,720 in 1922 and 15,188 in 1923. Proportionately, the decline between 1922 and 1923 has been greatest in the Maritime Provinces, where convictions fell from an aggregate of 1,050 in 1922 to 561 in 1923; there were also declines in Quebec, Ontario and Manitoba, whilst Saskatchewan, Alberta and British Columbia recorded increases.

23.—Charges, Convictions and Percentages of Acquittals for Indictable Offences, by Provinces, 1921-1923.

Provinces.	1921.			1922.			1923.		
	Charges.	Convictions.	Acquittals.	Charges.	Convictions.	Acquittals.	Charges.	Convictions.	Acquittals.
	No.	No.	p.c.	No.	No.	p.c.	No.	No.	p.c.
Prince Edward Island.....	21	15	28.6	40	27	32.5	18	13	27.8
Nova Scotia.....	1,029	712	30.8	973	701	28.0	636	400	36.9
New Brunswick.....	356	313	12.1	373	322	13.7	206	148	28.1
Quebec.....	3,606	2,654	26.4	3,779	2,885	23.7	3,501	2,655	24.1
Ontario.....	10,180	7,548	25.9	9,622	7,021	27.1	9,185	6,886	24.9
Manitoba.....	1,353	1,159	14.3	1,578	1,188	24.7	1,419	1,094	22.9
Saskatchewan.....	1,558	1,220	21.7	1,733	1,391	19.7	1,587	1,446	8.8
Alberta.....	1,652	1,263	23.5	1,613	1,171	27.4	1,753	1,424	18.6
British Columbia.....	1,693	1,282	24.3	1,308	1,004	23.2	1,443	1,116	22.5
Yukon.....	3	3	—	13	10	23.0	2	1	—
N.W. Territories.....	—	—	—	—	—	—	9	5	44.4
Canada.....	21,451	15,169	21.6	21,032	15,720	25.3	19,759	15,188	23.0

NOTE.—The figures of the above table do not include charges or convictions of juvenile delinquents.

Classes of Indictable Offences.—Indictable offences are divided under the Canadian system into six main classes, as follows: offences against the person, offences against property with violence, offences against property without violence,

malicious offences against property, forgery and other offences against the currency, and other indictable offences. Convictions in the first three and in the fifth classes show a notable decline between 1921 and 1923, but convictions for malicious offences against property (including arson) and for other indictable offences show an increase. Especially noteworthy is the increase of convictions for "illicit stills" from 220 in 1921 to 1,068 in 1923. Details by offences are given in Table 24, and the details of the disposition of the charges in Table 25, which shows, among other information, that convictions of females numbered 1,609 in 1923, as against 1,609 in 1922, and 1,765 in 1921. Details as to the occupations, civil condition, educational status, ages, use of liquors, birthplaces and religions of those convicted of indictable offences are given in Table 26.

24.—Indictable Offences, by Classes, during the years ended September 30, 1921-1923.

Classes and Offences.	1921.		1922.		1923.	
	Number or Charges.	Number of Convictions.	Number of Charges.	Number of Convictions.	Number of Charges.	Number of Convictions.
CLASS I.—OFFENCES AGAINST THE PERSON.						
Murder.....	76	17	56	19	47	15
Murder, attempt to commit.....	40	21	41	20	30	15
Manslaughter.....	89	39	88	45	79	38
Abortion and concealing birth of infants.....	27	15	39	25	23	12
Rape and other crimes against decency.....	621	341	650	350	624	365
Procuracion.....	64	37	59	25	35	19
Bigamy.....	72	56	92	74	77	56
Shooting, stabbing and wounding.....	240	137	215	119	249	157
Assault on females and wife.....	83	50	96	64	93	63
Aggravated assault.....	703	467	671	367	615	382
Assault on police officer.....	620	534	427	367	245	217
Assault and battery.....	1,275	1,007	1,270	987	1,208	920
Refusal to support family.....	180	101	274	154	271	212
Wife desertion.....	10	8	14	11	9	7
Various other offences against the person.....	131	83	141	80	155	97
Total.....	4,231	2,913	4,124	2,804	3,760	2,575
CLASS II.—OFFENCES AGAINST PROPERTY WITH VIOLENCE.						
Burglary, house, warehouse and shop-breaking.....	2,015	1,628	2,111	1,754	1,399	1,175
Robbery and demanding with menaces..	416	240	323	212	195	132
Highway robbery.....	27	20	32	11	15	14
Total.....	2,458	1,888	2,466	1,977	1,609	1,321
CLASS III.—OFFENCES AGAINST PROPERTY WITHOUT VIOLENCE.						
Bringing stolen goods into Canada.....	2	1	2	2	3	2
Embezzlement.....	6	6	35	19	28	14
False pretences.....	851	582	987	684	820	577
Feloniously receiving stolen goods.....	677	432	628	418	542	333
Fraud and conspiracy to defraud.....	736	505	773	466	732	472
Horse, cattle and sheep-stealing.....	118	80	82	50	40	18
Theft.....	8,493	6,559	7,848	5,938	7,472	5,865
Theft of mail.....	37	33	25	21	24	22
Total.....	10,920	8,198	10,350	7,598	9,661	7,303
CLASS IV.—MALICIOUS OFFENCES AGAINST PROPERTY.						
Arson.....	61	21	69	31	105	58
Malicious injury to horses, cattle, and other wilful damage to property.....	238	148	246	187	330	217
Total.....	299	169	315	218	435	275

NOTE.—The figures of the above table do not include charges or convictions of juvenile delinquents.

24.—Indictable Offences, by Classes, during the years ended September 30, 1921-1923—concluded.

Classes and Offences.	1921.		1922.		1923.	
	Number of Charges.	Number of Convictions.	Number of Charges.	Number of Convictions.	Number of Charges.	Number of Convictions.
CLASS V.—FORGERY AND OTHER OFFENCES AGAINST THE CURRENCY.						
Offences against currency.....	13	9	18	12	21	10
Forgery and uttering forged documents..	600	529	532	453	359	301
Total.....	613	538	550	465	380	311
CLASS VI.—OTHER OFFENCES NOT INCLUDED IN THE FOREGOING CLASSES.						
Attempt to commit suicide.....	45	32	52	41	36	27
Carrying unlawful weapons.....	251	232	151	127	161	141
Criminal negligence.....	66	42	75	44	86	45
Conspiracy.....	46	24	62	33	69	30
Driving automobile while drunk.....	147	142	234	202	354	353
Forceful entry.....	4	2	—	—	7	4
Indecent exposure and other offences against public morals.....	103	81	141	121	174	149
Intimidation.....	60	31	31	21	25	8
Keeping bawdy houses and inmates thereof.....	1,033	956	682	599	782	666
Offences against gambling and lottery acts.....	351	283	458	389	500	434
Offences against revenue laws.....	80	63	76	70	37	33
Illicit stills.....	233	220	686	643	1,106	1,068
Perjury and subornation of perjury.....	116	44	144	62	110	53
Prison breach and escape from prison...	164	154	140	128	145	134
Riot and affray.....	62	48	67	49	143	127
Sedition.....	2	1	3	3	2	1
Sodomy and bestiality.....	77	54	84	64	70	52
Various other misdemeanours.....	90	54	111	62	107	78
Total.....	2,930	2,463	3,197	2,658	3,914	3,403
Grand Total.....	21,451	16,169	21,032	15,720	19,759	15,188

NOTE.—Figures of this table do not include juvenile delinquents.

25.—Charges, Acquittals, Convictions and Sentences in respect of Indictable Offences, 1916-1923.

Charges and Sentences.	1916.	1917.	1918.	1919.	1920.	1921. ¹	1922. ¹	1923. ¹
	No.	No.	No.	No.	No.	No.	No.	No.
Charges.....	23,942	19,454	21,747	23,021	23,213	21,478	21,032	19,759
Acquittals ²	4,757	3,868	4,356	4,592	4,746	4,775	4,896	4,146
Persons detained for lunacy.....	25	27	21	33	24	30	27	21
Convictions.....	19,160	15,559	17,370	18,396	18,443	16,169	15,720	15,188
Males.....	15,436	13,086	14,871	16,101	16,722	14,404	14,111	13,579
Females.....	3,674	2,473	2,499	2,235	1,721	1,765	1,609	1,609
First conviction.....	16,806	13,093	14,310	15,118	15,096	12,589	13,022	12,686
Second conviction.....	1,337	1,373	1,551	1,641	1,663	1,845	1,335	1,212
Reiterated conviction.....	1,017	1,093	1,509	1,637	1,679	1,762	1,363	1,290
Sentences—								
Option of a fine.....	6,786	4,845	5,106	5,053	5,447	4,900	4,430	4,916
Under one year in gaol.....	3,816	2,890	3,284	3,455	3,750	3,912	3,982	3,601
One year and over in gaol.....	666	462	783	921	886	1,260	1,531	1,057
Two years and under five in penitentiary.....	799	540	701	978	873	1,122	1,153	949
Five years and over in penitentiary.....	178	145	185	229	245	481	435	223
For life in penitentiary.....	5	1	4	7	7	9	11	2
Death.....	21	15	20	28	26	17	19	15
Committed to reformatories.....	568	584	678	678	615	126	89	105
Other sentences.....	6,321	6,077	6,609	7,047	6,594	4,342	4,070	4,320

¹ Juvenile delinquents not included.

² Includes cases where proceedings were stayed, disagreement of jury, etc.

26.—Classification of Persons Convicted of Indictable Offences, 1917-1923.

Classes.	1917.	1918.	1919.	1920.	1921. ¹	1922. ¹	1923. ¹
	No.	No.	No.	No.	No.	No.	No.
Occupations—							
Agricultural.....	904	1,152	966	898	1,034	1,248	1,408
Commercial.....	1,424	1,813	1,963	2,406	2,648	2,426	2,479
Domestic.....	1,390	1,866	1,608	1,354	999	1,280	1,092
Industrial.....	937	1,214	1,424	1,483	1,522	1,445	1,156
Professional.....	390	359	315	168	194	89	90
Labourer.....	3,513	4,403	5,232	5,347	5,914	6,105	4,771
Not given.....	7,001	6,563	6,883	6,787	7,085	3,127	4,192
Civil condition—							
Married.....	3,450	4,474	4,472	4,434	4,811	5,200	5,245
Single.....	8,700	10,339	11,081	10,760	11,643	7,952	6,709
Widowed.....	110	269	315	196	182	218	171
Not given.....	3,299	2,288	2,528	3,053	2,760	2,350	3,063
Educational status—							
Unable to read or write....	763	1,084	843	925	904	672	512
Elementary.....	11,390	14,042	14,408	14,179	15,598	12,636	11,330
Superior.....	289	192	282	253	245	326	218
Not given.....	3,117	2,052	2,863	3,081	2,649	2,086	3,128
Ages—							
Under 16 years.....	3,606	4,104	3,876	3,355	—	—	—
16 years and under 21.....	1,928	2,938	3,846	3,288	3,289	3,169	2,641
21 years and under 40.....	5,511	6,728	6,446	7,216	7,898	8,205	7,277
40 years and over.....	1,448	1,748	1,795	1,795	1,932	2,182	2,559
Not given.....	3,066	1,852	2,433	2,789	3,050	2,164	2,711
Use of liquors—							
Moderate.....	5,387	11,656	10,726	11,000	11,331	8,990	8,509
Immoderate.....	1,332	1,357	1,276	1,232	1,322	1,197	1,015
Not given.....	8,840	4,357	6,394	6,211	6,743	5,533	6,664
Birthplace—							
England and Wales.....	780	1,177	1,329	1,489	1,659	1,342	1,190
Ireland.....	180	285	193	247	208	249	179
Scotland.....	242	381	381	462	458	359	390
Canada.....	7,097	9,322	10,157	9,570	10,638	8,607	7,802
Other British Possessions..	95	152	90	106	124	63	73
United States.....	845	947	990	1,148	1,113	992	766
Other foreign countries.....	2,228	3,161	2,780	2,589	2,511	2,188	1,969
Not given.....	4,092	1,945	2,476	2,832	2,625	1,929	2,819
Religion—							
Baptist.....	402	385	383	447	449	344	318
Roman Catholic.....	5,367	6,959	6,896	6,093	6,461	5,077	4,620
Church of England.....	1,576	1,910	2,186	2,234	2,527	2,223	1,784
Methodist.....	1,186	1,368	1,589	1,503	1,500	1,358	1,027
Presbyterian.....	1,034	1,397	1,432	1,621	1,603	1,409	1,391
Other Protestant.....	1,286	1,618	1,683	1,671	2,381	1,623	1,737
Jews.....	—	—	—	519	564	407	340
Other denominations.....	1,054	1,506	1,438	802	854	815	674
Not given.....	3,654	2,227	2,789	3,553	3,057	2,464	3,297
Residence—							
Cities and towns.....	11,157	14,190	16,305	16,178	16,120	12,404	11,886
Rural districts.....	1,501	1,779	2,051	2,111	3,074	2,940	2,941
Not given.....	2,901	1,401	40	154	202	376	361

¹ Figures for 1921 to 1923 do not include juveniles.

3.—Summary Convictions.

The following statistics relate to "non-indictable" offences committed by adults (persons 16 years of age or over) and disposed of by police magistrates or other justices of the peace, under authority of the Summary Convictions Act. Such convictions numbered 137,493 in the year ended Sept. 30, 1923, as compared with 136,322 in 1922 and 155,376 in 1921, an increase of 1,171 in the last year, but a decline of 17,883 as compared with 1921. There were 130,139 convictions of males, as against 129,188 in 1922, and 7,354 of females, as against 7,134 in 1922.

Details of summary convictions are given by provinces and by offences in Table 27 for the past three years from 1921 to 1923. Particularly notable in these figures is the increase of convictions for offences against liquor, prohibition and temperance Acts from 8,519 in 1922 to 10,088 in 1923, and the decline in convictions for offences against the Opium and Narcotic Drugs Act, from 1,858 in 1922 to 1,297 in 1923.

27.—Summary Convictions, by Provinces and by Offences, 1921-1923.

A.—BY PROVINCES.

Provinces.	Summary Convictions.			Increase or Decrease, 1922-23.
	1921.	1922.	1923.	
Prince Edward Island.....	373	309	321	+ 12
Nova Scotia.....	4,639	3,332	3,033	- 299
New Brunswick.....	2,680	2,281	2,179	- 102
Quebec.....	45,042	31,441	27,563	- 3,878
Ontario.....	63,874	63,015	64,639	+ 1,624
Manitoba.....	9,563	9,530	11,377	+ 1,847
Saskatchewan.....	6,137	6,876	8,346	+ 1,470
Alberta.....	8,571	7,766	8,359	+ 593
British Columbia.....	14,490	11,720	11,639	- 81
Yukon.....	37	52	37	- 15
Total.....	155,376	136,322	137,493	+ 1,171

B.—BY OFFENCES.

Offences.	1921.	1922.	1923.	Increase or Decrease, 1922-23.
Assault.....	3,261	2,999	3,199	+ 120
Carrying firearms and unlawful weapons.....	717	585	529	- 56
Contempt of court.....	11	24	18	- 6
Cruelty to animals.....	584	554	445	- 109
Disturbing religious and like meetings.....	28	19	62	+ 43
Fishery and Game Acts, offences against.....	874	1,435	1,343	- 92
Gambling Acts, offences against.....	4,961	3,563	4,173	+ 610
Immigration Act, offences against.....	174	58	71	+ 13
Inspection and Sales Acts, offences against.....	82	28	45	+ 17
Adulteration of food (Food and Drug Acts).....	232	143	195	+ 47
Weights and Measures Acts, offences against.....	129	88	122	+ 34
Liquor, Prohibition and Temperance Acts, offences against.....	10,458	8,519	10,088	+ 1,569
Malicious or wilful damage to property.....	874	691	608	- 83
Masters' and Servants' Acts, offences against.....	185	210	198	- 12
Non-payment of wages.....	793	1,002	1,075	+ 73
Municipal Acts and By-laws, breach of various.....	73,883	68,657	68,810	+ 153
Non-support of family and neglecting children.....	1,227	814	1,101	+ 287
Contributing to delinquency of children.....	1,137	169	250	+ 81
Opium and Narcotic Drug Act, various offences against.....	1,866	1,853	1,297	- 560
Profanation of the Lord's Day.....	868	851	782	- 69
Railway Acts, various offences against.....	535	619	308	- 311
Trespass on railway.....	1	655	535	- 120
Stealing ride on railway.....	1		461	+ 461
Revenue Laws, offences against.....	573	720	763	+ 43
Trespass.....	1,543	920	762	- 158
Vagrancy.....	5,154	4,530	3,774	- 756
Drunkenness.....	34,358	25,048	25,565	+ 517
Insulting, abusive and profane language.....	329	616	631	+ 15
Frequenting bawdy houses.....	3,088	3,318	3,772	+ 454
Loose, idle, disorderly and breach of the peace.....	5,986	5,925	4,968	- 957
Various other offences.....	2,466	1,699	1,623	- 76
Total.....	155,376	136,322	137,493	+ 1,171

¹ Included in "Railway Acts, various offences against".

Convictions for Drunkenness.—The number of summary convictions for drunkenness in Canada was 25,565 in 1923, as compared with 25,048 in 1922, an increase of 517, or 2.06 p.c. Table 28 shows the number of convictions by provinces for the five years 1919 to 1923, with increases and decreases for 1923 as compared with 1922.

28.—Convictions for Drunkenness for the five years 1919-1923.

Provinces.	1919.	1920.	1921.	1922.	1923.	Increase (+) or Decrease (—), 1923 as compared with 1922.	
	No.	No.	No.	No.	No.	No.	Per cent.
Prince Edward Island.....	116	120	144	162	164	+ 2	+ 1.23
Nova Scotia.....	2,879	3,140	2,156	1,492	1,392	— 100	— 6.70
New Brunswick.....	1,350	1,882	1,264	1,088	1,074	— 14	— 1.29
Quebec.....	7,116	11,863	9,943	7,103	6,260	— 843	—11.87
Ontario.....	8,498	15,021	14,498	10,063	11,370	+1,307	+12.99
Manitoba.....	1,570	2,330	1,429	1,623	1,680	+ 57	+ 3.51
Saskatchewan.....	618	919	708	816	884	+ 68	+ 8.33
Alberta.....	1,057	1,536	1,838	1,608	1,277	— 331	—20.58
British Columbia.....	1,004	2,948	2,376	1,081	1,443	+ 362	+33.49
Yukon Territory.....	9	10	2	12	21	+ 9	+75.00
Canada.....	24,217	39,769	34,353	25,048	25,565	+ 517	+2.06

NOTE.—Three juveniles not included in 1922.

4.—Juvenile Delinquency.

Juveniles under 16 years of age to the number of 6,571 were found guilty of various offences in the year ended Sept. 30, 1923, as compared with 6,298 in 1922, an increase of 273. Of these, 4,165 were convicted of "major" offences and 2,406 of "minor" offences, terms which correspond very nearly to "indictable" and "non-indictable" offences, as applied to adults. Convictions for "major" offences numbered 4,065 in 1922, and convictions for "minor" offences 2,233. The major offences proven against juveniles in 1922 and 1923 are shown by provinces in Table 29 and by chief types of offences committed in Table 30.

29.—Juvenile Delinquents convicted of Major and Minor Offences, by Provinces and Sex, 1922 and 1923.

Provinces.	Major Offences.			Minor Offences.		
	1922.	1923.	Increase or Decrease.	1922.	1923.	Increase or Decrease.
Prince Edward Island.....	M. 5	10	+ 5	-	-	-
	F. -	-	-	-	-	-
Total	5	10	+ 5	-	-	-
Nova Scotia.....	M. 163	249	+ 86	79	75	- 4
	F. 4	4	-	-	1	+ 1
Total	167	253	+ 86	79	76	- 3
New Brunswick.....	M. 44	59	+ 15	6	-	- 6
	F. 1	1	-	1	-	- 1
Total	45	60	+ 15	7	-	- 7
Quebec.....	M. 620	844	+224	498	519	+ 21
	F. 35	20	- 15	126	109	- 17
Total	655	864	+209	624	628	+ 4
Ontario.....	M. 1,802	1,589	-213	810	951	+141
	F. 50	44	- 6	89	98	+ 9
Total	1,852	1,633	-219	899	1,049	+150
Manitoba.....	M. 587	550	- 37	461	428	- 33
	F. 40	31	- 9	34	67	+ 33
Total	627	581	- 46	495	495	-
Saskatchewan.....	M. 132	241	+ 59	41	21	- 20
	F. 14	8	- 6	-	7	+ 7
Total	196	249	+ 53	41	28	- 13
Alberta.....	M. 232	241	+ 9	21	36	+ 15
	F. 8	5	- 3	3	2	- 1
Total	240	246	+ 6	24	38	+ 14
British Columbia.....	M. 266	256	- 10	38	74	+ 36
	F. 12	12	-	26	18	- 8
Total	278	268	- 10	64	92	+ 28
Yukon.....	M. -	1	+ 1	-	-	-
Canada.....	M. 3,901	4,040	+139	1,954	2,104	+150
	F. 164	125	- 39	279	302	+ 23
Total	4,065	4,165	+100	2,233	2,406	+173

Major Offences.—In Table 30 are shown the various major offences for which juvenile delinquents were convicted in 1922 and 1923. It will be observed that theft, together with house and shop-breaking, constitutes the great bulk of the offences; in 1923, 83 p.c. of the major offences were of this character.

30.—Juvenile Delinquents Convicted of Major Offences, by Offences, 1922 and 1923.

Offences.	1922.	1923.	Increase or Decrease.	
			No.	Per cent.
Assault, aggravated and wounding.....	29	45	+ 16	+ 55.17
“ common.....	39	67	+ 28	+ 71.80
“ indecent.....	25	27	+ 2	+ 8.00
Sexual offences.....	30	12	- 18	- 60.00
Endangering life by obstructing railway.....	49	25	- 24	- 48.97
Murder.....	-	1	+ 1	-
Other offences against the person.....	-	2	+ 2	-
House and shop-breaking.....	805	740	- 65	- 8.07
Robbery.....	1	15	+ 14	-
Theft and receiving stolen goods.....	2,530	2,730	+ 200	+ 7.90
Fraud and false pretences.....	30	10	- 20	- 66.67
Arson.....	12	28	+ 16	+ 133.33
Other wilful damage to property.....	429	436	+ 7	+ 1.63
Forgery.....	13	9	- 4	- 30.76
Immoral and indecent conduct.....	54	10	- 44	- 81.48
Various other misdemeanours.....	19	8	- 11	- 57.89
Total.....	4,065	4,165	+100	+ 2.46

Minor Offences.—Of the 2,406 juvenile delinquents found guilty of minor offences in 1923, 635 were convicted of breaches of municipal by-laws, 183 of disorderly conduct, 194 of disturbing the peace, 195 of incorrigibility, 302 of trespass, 263 of truancy, 195 of vagrancy and 633 of other minor offences.

5.—Miscellaneous Judicial Statistics.

Police Statistics.—In 1923, 133 cities and towns out of a total of 141, with a population of 4,000 and over, supplied police statistics to the Dominion Bureau of Statistics. These cities and towns, with an aggregate population of 3,293,711, had 4,074 policemen, who made 72,523 arrests and summoned 88,816 persons to appear in court. The total number of offences committed during the year and made known to the police was 196,446, and the number of prosecutions was 143,899, or 73 p.c. of the known offences. Convictions secured in respect of these offences numbered 112,815, being 57 p.c. of the known offences and 78 p.c. of the prosecutions.

The number of automobiles reported stolen was 4,326, of which 3,984 were recovered. Of 5,902 bicycles stolen, 3,486 were recovered. The value of other lost articles reported to the police was \$2,035,520, of which 60 p.c. was recovered.

Pardons and Commutations.—The prerogative of mercy was exercised during the year in 1,579 cases, 1,154 persons being released on ticket of leave and 425 without ticket of leave. Further, 61 tickets of leave were made unconditional and 6 death sentences were commuted to life imprisonment.

Population of Penal Institutions.—The penal institutions of Canada may be classified under four heads: penitentiaries, distinguished by long sentences and comparatively slow turn-over; reformatories for boys and reformatories for girls, also with a rather slow turnover, but more rapid in the case of boys than in that of girls; and lastly common jails, where the turn-over is extremely rapid. If the average population for the year be the average of the inmates at the beginning and end of the year, and the number discharged be the turn-over, the turn-over in 1923 was: in reformatories for girls, 78 p.c.; in jails, no less than 1,596 p.c. Thus the average time spent in jail is rather less than 1 month.

31.—Population of Penal Institutions, 1921-1923.

Penal Institutions.	In custody. beginning of year.	Admitted during year.	Discharged during year.	In custody at end of year.
1921.				
Penitentiaries.....	1,931	1,038	819	2,150
Reformatories for boys.....	1,636	4,143	3,821	1,958
Reformatories for girls.....	281	414	388	307
Jails.....	2,156	38,171	37,579	2,748
Total.....	6,004	43,766	42,607	7,163
1922.				
Penitentiaries.....	2,150	1,366	876	2,640
Reformatories for boys.....	2,023	4,247	4,461	1,809
Reformatories for girls.....	344	543	482	405
Jails.....	2,674	35,028	35,043	2,659
Total.....	7,191	41,184	40,862	7,513
1923.				
Penitentiaries.....	2,640	1,053	1,207	2,486
Reformatories for boys.....	1,878	4,142	4,131	1,889
Reformatories for girls.....	336	243	257	322
Jails.....	2,678	33,698	34,083	2,293
Total.....	7,532	39,136	39,678	6,990

NOTE.—For corresponding figures for 1918, 1919 and 1920, see p. 957 of the 1922-23 Year Book.

NOTE.—Penitentiary statistics till 1919 were supplied directly by each penitentiary, and were for the calendar year. For 1920 and subsequent years they have been supplied by the Inspector of Penitentiaries and are for the fiscal year ended March 31. For more detailed statistics of penitentiaries, see pp. 958-959 of the 1922-23 Year Book.

5.—Divorces in Canada.

For many years subsequent to Confederation, the number of divorces granted in Canada was very small, 1883, with 13 divorces, being the first year in which the number attained two figures, while 1903, with 21 divorces, was the record year up to that time. Thereafter the numbers grew more rapidly, 1909 showing 51 divorces and 1913, the last pre-war year, 59 divorces. This number was, however, less than one per 1,000 of the marriages contracted in Canada in these years.

The effect of the war was to increase very greatly the number of divorces granted in Canada. The causes may be found in the generally unsettling psychological effect of the war period, and the long separations between men on active service and their wives. The provision of new facilities for divorce is also to be considered; owing to a decision of the Imperial Privy Council, divorces in the Prairie Provinces have subsequently to 1918 been granted by the courts of these provinces, so that Ontario and Quebec are now the only provinces in which the applicant for divorce must secure a special Private Act of Parliament.

The above-mentioned causes have tended to produce the recent increase in the number of divorces granted in Canada, which have grown from 114 in 1918 to 543 in 1924, these numbers being those of final decrees, which alone really constitute divorces. The declines in 1922 and 1923 may possibly indicate that the wave of divorces due to the war has passed its highest point. The statistics of divorces granted in the years from 1901 to 1924 inclusive will be found in Table 32. (For divorces in the years prior to 1901 see 1921 Year Book, p. 825).

32.—Statistics of Divorces Granted in Canada, 1901-1924.

Years.	Granted by the Dominion Parliament.				Granted by the Courts.			Total for Canada.
	Ontario.	Quebec.	Northwest Territories.	Manitoba.	Nova Scotia.	New Brunswick.	British Columbia.	
1901.....	2	—	—	—	10	—	7	19
1902.....	2	—	—	—	9	1	3	15
1903.....	2	1	1	1	8	4	4	21
1904.....	5	1	—	—	6	2	5	19
1905.....	2	3	2	2	6	2	18	35
			Alta. Sask.					
1906.....	10	3	1	—	5	1	17	37
1907.....	3	1	—	1	8 ¹	3	9	25
1908.....	8	—	—	—	5	5	12	30
1909.....	8	4	1	2	8 ¹	5	22	51
1910.....	14	2	—	3	13 ¹	6	12	51
1911.....	13	4	2	3	10 ¹	6	19	57
1912.....	9	3	2	1	4	4 ²	11	35
1913.....	20	4	4	6	—	4	20	59
1914.....	18	7	4	2	10	12	15	70
1915.....	10	3	3	1	13	6	16	53
1916.....	18	1	1	2	14	11	18	67
1917.....	10	4	2	—	8	6	23	54
1918.....	10	2	2	—	24	10	65	111 ¹
1919.....	49	4	36 ³	3	36	13	147	376
1920.....	91	9	64 ⁴	26 ⁴	42 ⁴	15	136	429
1921.....	101	9	84 ⁴	50 ⁴	45	13	128	548
1922.....	90	6	129 ⁴	37 ⁴	35	12	138	544
1923.....	105	11	87 ⁴	41 ⁴	22	19	139 ³	505
1924.....	114	13	118 ⁴	28 ⁴	42	15	136 ³	543

NOTE.—In Prince Edward Island only one divorce was granted from 1868 to 1914; this was in 1913. In consequence of a decision of the Imperial Privy Council, divorces in Manitoba, Saskatchewan and Alberta have subsequently to 1918 been granted by the courts of these provinces. ¹Includes one judicial separation. ²Includes one not effective till court costs are paid. ³One by Parliament. ⁴Granted by courts.

⁵ Two granted by Parliament.

6.—The Civil Service of Canada.

Prior to 1882, appointments to the Civil Service of Canada were made directly by the Government of the day. In that year, a Board of Civil Service Examiners was appointed to examine candidates and issue certificates of qualification to those successful at examinations. Appointments, however, were still made by the Government.

The Royal Commission of 1907, appointed to inquire into the Civil Service Act and its operation, reported in favour of the creation of a Civil Service Commission; in 1908 this body was appointed, consisting of two members appointed by the Governor in Council and holding office during good behaviour, but being removable by the Governor-General on address of the Senate and House of Commons. The Civil Service was classified into three divisions under the deputy heads of Departments, each division consisting of two sub-divisions, each of these having its scale of salaries. The Commission was charged with the organization of and appointments to the inside service and with the competitive examination of candidates for positions in the inside, and the qualifying examination of candidates for the outside service. All British subjects between 18 and 35 years of age, having resided in Canada for two years, were eligible to try these examinations under the system of open competition.

In 1918 a third member of the Civil Service Commission was appointed. The Civil Service Act of that year (8-9 Geo. V, c. 12) extended the Commission's authority to include appointments to the outside service, and enlarged its powers regarding the regulation of the duties of employees and its access to and relations with the various Departments of the Government.

From the beginning of 1924, a monthly return of personnel and salaries has been made by each Department to the Dominion Bureau of Statistics, according to a plan that ensures comparability between Departments and continuity in point of time. The institution of this system was preceded by an investigation back to 1912, the summary results of which are presented in Table 33.

During the war years, as will be seen from Table 33, the number of employees increased very rapidly, as a result of the enlargement of the functions of government, the imposition of new taxes necessitating additional officials as collectors, and the creation of such new services as the Department of Soldier's Civil Re-establishment and the Soldier Settlement Board. The maximum was reached in January, 1920, when 47,133 persons were employed, a number which had been reduced to 38,062 in January, 1924. It may be added that, out of the latter number, 1,211 in the Income Tax Branch, 3,094 in the Department of Soldiers' Civil Re-establishment and 618 in the Land Settlement Service—or 4,923 in all—were engaged in services of outstanding importance which had no existence before the war. Further, an additional 10,213 persons were, in January, 1924, employed in the Post Office Department, performing services of an industrial rather than of a governmental type, and receiving their salaries out of the payments of the public for services immediately rendered, rather than out of taxation. This postal service alone accounted for \$1,370,711 of the \$4,746,695 paid in salaries and bonuses in January, 1924, or almost 29 p.c. of the total.

All employees of the Government are included in the statement, with the exception of casual labourers and classes outside the ordinary meaning of "civil" employment, such as members of the permanent military and naval forces and of the Royal Canadian Mounted Police. Revenue postmasters and sub-postmasters, licensed stamp vendors and mail contractors are also not included in the survey, as they are paid either out of revenue or under tender and contract arrangements.

33.—Summary of Civil Service Employees (permanent and temporary) of the Government of Canada, together with total salaries, in January in the years 1912-1924, inclusive.

Years.	Employees.	Salaries.	Bonus.	Total Salaries and Bonus.
	No.	\$	\$	\$
1912.....	20,016	1,519,778	16,413	1,536,190
1913.....	22,621	1,780,703	22,569	1,803,272
1914.....	25,107	1,960,238	27,971	1,988,209
1915.....	28,010	2,268,700	32,167	2,300,867
1916.....	29,219	2,400,068	31,431	2,431,499
1917.....	32,435	2,673,767	29,167	2,702,934
1918.....	38,369	3,147,461	94,321	3,241,782
1919.....	41,825	3,552,686	557,882	4,110,568
1920.....	47,133	4,423,157	965,538	5,388,695
1921.....	41,957	4,414,660	861,973	5,276,642
1922.....	41,094	4,369,509	616,105	4,985,614
1923.....	38,992	4,268,357	463,470	4,731,827
1924.....	38,062	4,297,467	449,228	4,746,695

34.—Detailed Table of Civil Service Personnel, showing, by Departments, the Numbers, Monthly Salaries and Monthly Bonuses for (a) Permanent Employees, (b) Temporary Employees and (c) Permanent and Temporary Employees Combined, for January, 1924.

Departments.	Permanent Employees on Jan. 1, 1924.	Temporary Employees on Jan. 1, 1924.	All Employees on Jan. 1, 1924.	Total Monthly Salary for January.	Total Monthly Bonus for January.
	No.	No.	No.	\$ cts.	\$ cts.
Agriculture.....	1,422	175	1,597	219,054 00	15,227 00
Archives.....	57	24	81	10,991 84	705 91
Auditor-General's.....	147	62	209	23,501 66	1,818 66
Civil Service Commission.....	118	54	172	18,274 73	1,303 04
Customs and Excise.....	3,605	320	3,925	474,258 00	54,182 00
External Affairs.....	42	57	99	13,020 52	1,329 69
Finance.....	340	206	546	48,046 16	5,480 46
Commissioner of Income Taxation ¹	-	-	1,211	121,187 25	11,587 06
Governor-General's Secretary ²	12	-	12	2,895 82	124 30
Health.....	160	124	284	31,667 23	1,856 86
House of Commons— Clerk of the House.....	77	18	95	21,639 74	267 73
Sergeant-at-Arms.....	24	64	88	7,580 40	767 14
Immigration and Colonization.....	620	220	840	95,796 01	9,808 47
Indian Affairs.....	748	46	794	56,577 99	5,098 30
Insurance.....	28	4	32	5,525 00	197 52
Fire Prevention Branch.....	2	-	2	485 00	-
Interior.....	1,922	130	2,052	295,503 25	18,272 06
International Joint Commission.....	5	-	5	2,363 33	-
Justice.....	87	17	104	19,185 00	757 65
Outside Penitentiary Service.....	429	66	495	51,255 54	9,861 30
Labour.....	90	4	94	13,655 00	764 23
Library of Parliament.....	13	7	20	3,697 24	156 00
Marine and Fisheries.....	2,724	42	2,766	200,523 00	19,368 00
Mines.....	724	22	746	52,137 62	1,806 81
National Defence.....	511	725	1,236	123,361 65	13,768 60
Royal Military College.....	47	21	68	8,124 16	1,128 49
Patents and Copyrights.....	19	16	35	14,701 93	1,114 84
Pensions ³	98	11	109	7,350 73	86 60
Post Office— Civil Government.....	722	87	809	89,983 38	9,306 87
Outside Service.....	8,635	769	9,404	1,093,517 72	177,903 37
Privy Council.....	19	-	19	3,270 82	221 66
Public Printing and Stationery.....	243	445	688	92,570 42	3,814 56
Public Works— Inside Service.....	301	19	320	51,112 33	2,698 85
Outside Service ¹	-	-	2,684	202,066 57	24,721 85
Railways and Canals.....	773	788	1,561	173,581 43	10,421 80
Royal Canadian Mounted Police.....	28	13	41	5,631 40	425 63
Secretary of State.....	74	48	122	15,619 87	1,177 63
Senate.....	28	-	28	6,393 00	230 00
Soldiers' Civil Re-establishment.....	211	2,883	3,094	353,242 00	23,457 00
Soldier Settlement Board.....	15	693	708	83,215 33	6,669 00
Trade and Commerce.....	675 ⁴	728	1,403	184,302 91	11,308 83
Chief Electoral Officer.....	3	1	4	600 00	31 25

¹ Total only given.² Salaries of A.D.C.'s included.³ Including 3 Commissioners paid from statute vote.⁴ Including Government elevator employees, not classified as permanent and temporary.

XIII.—SOURCES OF OFFICIAL STATISTICAL AND OTHER INFORMATION RELATIVE TO CANADA.

The chief source of information on the current state of the country is the Dominion Bureau of Statistics, organized as the central statistical bureau for Canada, and described in the first part of this section; a list of its publications, which cover almost the whole field of the national statistics, is appended.

The second part of the section contains a list of the Acts of Parliament administered by the several Departments of the Dominion Government, and the third part a bibliography of the publications of these Departments. This is followed by a bibliography of the publications of Provincial Governments.

I.—THE DOMINION BUREAU OF STATISTICS¹.

The Dominion Bureau of Statistics was set up by statute in 1918 as a central statistical department for Canada, (8-9 Geo. V, c. 43). The Act was a consolidation of all previous statistical legislation and was based on the report of a Commission on Statistics, appointed in 1912, which recommended (a) a series of specific reforms and enlargements in Canadian statistics, and (b) a policy of statistical co-ordination for the Dominion, under central direction. In 1915, following the recommendations in this report, the office of Dominion Statistician was created.

The Bureau has been constituted by the transfer or absorption, by Orders in Council, of the following work and branches: (1) the Census and Statistics Office (covering the census, and also agriculture, general manufactures and criminal justice); (2) Fisheries Statistics; (3) Mining Statistics; (4) Forestry Statistics; (5) Dairying and Fruit Statistics; (6) Water and Electric Power Statistics; (7) the Railways and Canals Statistical Branch of the Department of Railways and Canals; (8) the Trade Statistical Branch (exports and imports); (9) Grain Trade Statistics; (10) Live Stock Statistics; (11) Prices Statistics; and (12) Employment Statistics. In addition, four new branches were erected, dealing respectively with Public Finance, Internal Trade, Vital Statistics and Education. Subsequently the statistical activities of the Fuel Controller and of the Board of Commerce were absorbed. Modifications of the Bankruptcy, Public Health, and Railway Acts and of the regulation on franking privileges were also made, with a view to facilitating the collection of statistics.

The Bureau has completed the plans for a unified, nation-wide statistical system, covering every important phase of social and economic activity, and has carried them out to a considerable degree.

The main achievement of the Bureau has been in the organization of the several subjects in correlation with each other in accordance with this general plan, and the consequent establishment of a comprehensive viewpoint of the country as a "going concern." In addition, there has been created what is frequently called a central "thinking office" in statistics, continuously in touch with general conditions and the line of probable developments.

¹ A fuller account of the formation and activities of the Bureau of Statistics will be found on pages 961 to 964 of the 1922-23 Year Book.

The final concept in the organization of the Bureau of Statistics is that of a national laboratory for social and economic research. Statistics are not merely a record of what has been, but are for use in planning what shall be; it is the duty of a statistical bureau to assist directly in the day-to-day problems of administration, as well as to provide their theoretic background. One of the most significant of recent developments in administration is the extent to which statistical organization has been increased as a guide to national policy. Though its usefulness is only begun, the Dominion Bureau of Statistics has laid the foundations for a service comparable with the increasingly important position taken by Canada in the economic and political world.

Publications of the Bureau.—The first annual report of the Dominion Statistician contained a full description of the organization of the Bureau and of its subject matter.¹ The main branches of the Bureau are as follows: I. Administration; II. Population—Census and Vital Statistics; III. Agricultural Statistics; IV. Fisheries, Furs and Dairy Products; V. Mining, Metallurgical and Chemical; VI. Forestry and Allied Industries; VII. General Manufactures; VIII. External Trade (Imports and Exports); IX. Internal Trade; X. Transportation; XI. Financial Statistics; XII. Statistics of Administration of Justice; XIII. Education Statistics; XIV. General Statistics. The publications of the several Branches are as follows:

ADMINISTRATION—

Annual Report of the Dominion Statistician.

POPULATION—

Census—

I. *Census of Population and Agriculture, 1921.*

Bulletins of the Sixth Census of Canada, 1921, as follows:

- (1) Population of the Dominion: (a) Population of Canada, 1921, by Provinces, Electoral Districts, Cities, Towns, etc. (b) Religions of the People, 1921. (c) Origins of the People, 1921. (d) Racial Origins of U.S.-born, 1921. (e) Birthplaces of the People, 1921. (f) Canadian-born according to Nationality of Parents, 1921. (g) Year of Immigration, Naturalization and Citizenship, 1921. (h) Ages of the People, 1921. (i) Conjugal Condition of the People, 1921. (j) Language Spoken, 1921. (k) Literacy, 1921. (l) Occupations, 1921. Also bulletins on population by provinces as follows: (a) Population of Nova Scotia—Electoral Districts, etc. (b) Population of Prince Edward Island—Electoral Districts, etc. (c) Population of New Brunswick—Electoral Districts, etc. (d) Population of Quebec—Electoral Districts, etc. (e) Population of Ontario—Electoral Districts, etc. (f) Population of Manitoba—Electoral Districts, etc. (g) Population of Saskatchewan—Electoral Districts, etc. (h) Population of Alberta—Electoral Districts, etc. (i) Population of British Columbia—Electoral Districts, etc.
- (2) Census of Agriculture, 1921: (a) Field Crops of Prairie Provinces, 1921. (b) Agriculture of Canada—General Summary. (c) Pure-bred Domestic Animals, 1921. (d) Agriculture of Nova Scotia, 1921. (e) Agriculture of Prince Edward Island, 1921. (f) Agriculture of New Brunswick, 1921. (g) Agriculture of Quebec, 1921. (h) Agriculture of Ontario, 1921. (i) Agriculture of Manitoba, 1921. (j) Agriculture of Saskatchewan, 1921. (k) Agriculture of Alberta, 1921. (l) Agriculture of British Columbia, 1921.

Reports of the Sixth Census of Canada, 1921, as follows:

Vol. I. Introduction—Number, Sex and Distribution—Racial Origins—Religions.

Vol. II. Ages—Conjugal Condition—Birthplaces—Birthplaces of Parents—Year of Immigration and Naturalization—Language Spoken—Literacy—School Attendance—Blindness and Deaf-Mutism.

¹This report is now out of print.

N.B.—The Reports of the 1921 census will include four volumes on population and one on agriculture; there will also be issued a series of special reports on the Foreign-born, Origins of the People, Religions, Families, Housing, Literacy and School Attendance, Earnings of the People, Unemployment, etc.

II. *Census of Population, etc., 1911.*

Reports of the Fifth Census of Canada, 1911: Vol. I. Areas and Population by Provinces, Districts and Subdistricts, with Introduction, Tables I to XV, pp. i-viii, 1-623. Vol. II. Religions, Origins, Birthplaces, Citizenship, Literacy and Infirmities by Provinces, Districts and Subdistricts, with Introduction. Tables I-XLVI, pp. i-iv, 1-634. Vol. III. Manufactures for 1910, as enumerated in June, 1911, with Introduction. Tables I-XX, pp. i-xvi, 1-432. Vol. IV. Agriculture, with Introduction. Tables 1-90, I-XXXV, pp. i-xcv, 1-428. Diagrams 5 pp. Vol. V. Forest, Fishery, Fur and Mineral Production, with Introduction. Tables 1-51, I-XXVI, pp. i-l, 1-171. Vol. VI. Occupations of the People, with Introduction. Tables 1-25, I-VI, pp. i-xxxi, 1-469.

Bulletins of the Fifth Census of Canada, 1911: Manufactures of Canada—Dairy Industries—Agriculture, Prince Edward Island—Agriculture, Nova Scotia—Agriculture, New Brunswick—Agriculture, Quebec—Agriculture, Ontario—Agriculture, Manitoba—Agriculture, Saskatchewan—Agriculture, Alberta—Agriculture, British Columbia—Religions—Origins of the People—Birthplaces of the People—Educational Status—Mineral Production—Infirmities—Ages—School Attendance.

Special Report of the Foreign-born Population. (Abstracted from the Records of the Fifth Census of Canada, June, 1911, 23 tables, 62 pp., 1915.)

III. *Census of Population and Agriculture of the Prairie Provinces, 1916.*

Report of the Census of Population and Agriculture of the Prairie Provinces, 1916. Tables 1-54, I-XXVI, pp. i-lxiv, 1-356.

IV. *Inter-censal Estimates of Population.*

Births, Deaths and Marriages—

Vital Statistics.—(1) Annual Report on Vital Statistics of Canada by provinces and municipalities. (2) Monthly Report of Births, Marriages and Deaths, by provinces. (3) Report of Conference on Vital Statistics, held June 19-20, 1918, pp. 1-48.

PRODUCTION—

I. General Summary of Production.

Including and differentiating (gross and net) (1) Primary Production (Agriculture, Fishing, Furs, Forestry and Mining), and (2) Secondary Production, or General Manufactures.

II. Agriculture.

(1) Monthly Bulletin of Agricultural Statistics. (Contains monthly reports on agricultural conditions, prices, weather, etc.—preliminary, provisional and final estimates of areas, yields, quality and values of field crops—wages of farm help—numbers and values of farm live stock, poultry, etc.—fruit statistics—stocks of grain—annual summary of value of agricultural production—international agricultural statistics). (2) Advance Summaries of Agricultural Statistics (monthly). (3) Fruit Statistics of Canada, 1920-23. (4) Cost of Grain Production in Canada, 1923. (5) Handbook for the Use of Crop Correspondents, with selection of Annual Agricultural Statistics, 1908-23.

(See also Census of Agriculture above).

III. Furs.

(1) Annual Report on Fur Farms. (2) Annual Report on the Production of Raw Furs (wild-life).

IV. Fisheries.

(1) Annual Report on Fisheries Statistics. (2) Advance Summaries of Fish caught, marketed and prepared, by provinces, districts, etc.

V. Forestry.

- (1) Annual summary of the value, etc., of forest production. (Covers operations in the woods for saw-mills, shingle-mills, pulp and paper-mills, etc., production of mining timber, production of poles and cross ties, and farm production (decennial) of firewood, posts, etc.)

(See also Reports on Manufactures of Forestry Products listed under "Manufactures," Section VII, subsection (5).)

VI. Mineral Production.

- (1) General Reports: (a) Annual Report on the Mineral Production of Canada; (b) Preliminary Reports (semi-annual) on the Mineral Production of Canada.
- (2) Coal: (a) Annual Report on Coal Statistics for Canada; (b) Monthly Report on Coal Statistics for Canada.
- (3) Annual Bulletins on the following subjects: Metals—(a) Arsenic; (b) Cobalt; (c) Copper; (d) Gold; (e) Iron Ore; (f) Lead; (g) Nickel; (h) Metals of the Platinum Group; (i) Silver; (j) Zinc; (k) Miscellaneous Non-Ferrous Metals including: Aluminium, Antimony, Chromite, Manganese, Mercury, Molybdenum, Tin, Tungsten. Non-Metals—(a) Asbestos; (b) Coal; (c) Feldspar; (d) Gypsum; (e) Iron Oxides; (f) Mica; (g) Natural Gas; (h) Petroleum; (i) Quartz; (j) Salt; (k) Talc; (l) Miscellaneous Non-Metallic Minerals including: Actinolite, Barytes, Corundum, Fluorspar, Graphite, Grindstones, Magnesite, Magnesium Sulphate, Mineral Waters, Natro-alunite, Peat, Phosphate, Pyrites, Sodium Carbonate, Sodium Sulphate, Tripolite. Structural Materials and Clay Products—(a) Cement; (b) Clay and Clay Products; (c) Lime; (d) Sand and Gravel; (e) Stone and Slate.
- (4) Industrial Reviews of the following: (a) The Gold Industry; (b) Copper-Gold-Silver Industry; (c) Nickel-Copper Industry; (d) Silver-Cobalt Industry; (e) Silver-Lead-Zinc Industry.
- (5) Provincial Mineral Production Reports for: (a) Nova Scotia; (b) New Brunswick; (c) Quebec; (d) Ontario; (e) Manitoba; (f) Saskatchewan; (g) Alberta; (h) British Columbia; (i) Yukon.
- (6) Special Reports: (a) Report on the Consumption of Prepared Non-Metallic Minerals in Canada; (b) Report on the Consumption of Mine and Mill Materials in Canada.

(See also Reports on Iron and Steel and their Products, Manufactures of Non-Ferrous Metals, Manufactures of Non-Metallic Minerals, and Chemicals and Allied Products, listed under "Manufactures," Section VII, subsections (6), (7), (8) and (9).)

VII. Manufactures.

- (1) General summary, by provinces and leading cities—industrial groups classified by component materials, purpose, etc., of products—comparative statistics.
 - (2) Manufactures of Vegetable Products—Special Bulletins as follows: (a) Coffee and Spices; (b) Cocoa and Chocolate; (c) Fruits and Vegetables, including canning, evaporating and preserving; (d) Pickles, Sauces, Vinegar and Cider; (e) Flours and Cereals (see also under heading "Internal Trade"); (f) Bread and other Bakery Products; (g) Biscuits and Confectionery; (h) Macaroni and Vermicelli; (i) Liquors, Distilled; (j) Liquors, Malt; (k) Liquors, Vinous; (l) Rubber Goods and Rubber Boots and Shoes; (m) Starch and Glucose; (n) Sugar; (o) Tobacco Products; (p) Linseed Oil and Oil Cake.
 - (3) Animal Products and their Manufactures—Special Reports and Bulletins as follows: (a) Dairy Products; (b) Slaughtering and Meat Packing and Allied Industries; (c) Fish and Fish Products; (d) Leather Tanneries; (e) Harness and Saddlery; Leather Belting; Trunks and Valises; Miscellaneous Leather Goods; (f) Leather Boots and Shoes; Leather Boot and Shoe Findings; (g) Leather Gloves and Mitts; (h) Fur Goods; Fur Dressing.
- (See also Reports on Live Stock, etc., listed under "Internal Trade.")
- (4) Textile and Allied Industries—General report. Special Bulletins as follows: (a) Cotton textiles (cloth, yarn, thread and waste); (b) Woollen Textiles (cloth, yarn, waste, carpets, etc., and woollen goods, n.e.s.);

- (c) Silk Mills; (d) Clothing (men's and women's factory); (e) Hats and Caps; (f) Hosiery and Knit Goods; (g) Men's Furnishings, n.e.s.; (h) Oiled Clothing and Waterproofs; (i) Cordage, Rope and Twine.
- (5) Manufactures of Forestry Products—Special Reports as follows: (1) Lumber, Lath and Shingle Industry; (2) Pulp and Paper; (3) Manufactures of Wood and Paper Products: (a) Cooperage; (b) Planing-Mills, Sash and Door Factories; (c) Printing, Bookbinding, Publishing, Lithographing and Engraving, Stereotyping and Electrotyping, Maps and Blue Prints; (d) Furniture; (e) Carriages, Wagons and Sleighs, and Materials therefor; (f) Canoes, Rowboats and Launches; (g) Coffins and Caskets; (h) Containers—Boxes and bags (paper); boxes and packing cases (wood); baskets and crates; woodenware.
- (6) Iron and Steel and Their Products: Pig Iron and Ferro-Alloys—Steel and Rolled Products—Castings and Forgings—Boilers and Engines—Agricultural Implements—Industrial Machinery—Office and Household Machinery—Automobiles—Automobile Accessories—Bicycles—Railway Rolling Stock—Heating and Ventilating Equipment—Wire and Wire Goods—Sheet Metal Products—Hardware and Tools—Miscellaneous Iron and Steel Products.
- (7) Manufactures of Non-Ferrous Metals: Aluminium Ware—Brass and Copper Products—Lead, Tin and Zinc Products—Manufactures of the Precious Metals—Electrical Apparatus and Supplies—Miscellaneous Non-Ferrous Metal Goods.
- (8) Manufactures of Non-Metallic Minerals: Aerated Waters—Asbestos and Allied Products—Cement Products and Sand-Lime Brick—Coke and By-Products—Glass (blown, cut, ornamental, etc.)—Illuminating and Fuel Gas—Monumental and Ornamental Stone—Petroleum Products.
- (9) Chemicals and Allied Products: Coal Tar and its Products—Acids, Alkalies, Salts and Compressed Gases—Explosives, Ammunition, Fireworks and Matches—Fertilizers—Medicinal and Pharmaceutical Preparations—Paints, Pigments and Varnishes—Soaps, Washing Compounds and Toilet Preparations—Inks, Dyes and Colours—Wood Distillates and Extracts—Miscellaneous Chemical Products.
- (10) Miscellaneous Manufactures—Special Bulletins as follows: (a) Brooms, Brushes and Mops; (b) Musical Instruments (including pianos, organs and phonographs) and Musical Instrument Materials and Parts; (c) Buttons.
- (11) Summary Reports on Groups of Industries, classified according to the use or purpose of their principal product as follows: (a) Food; (b) Clothing; (c) Drink and Tobacco; (d) Personal and Household Goods; (e) Books; (f) Equipment; (g) Materials for further manufacture.
- N.B.—For Statistics of Water-Power and Central Electric Stations, see under heading "Public Utilities".

VIII. *Construction*.—(a) The Building and General Construction Industry; (b) Railway, Telephone and Telegraph—Construction, Maintenance-of-Way and Repairs; (c) Government and Municipal Construction; (d) The Bridge-building Industry; (e) The Shipbuilding Industry; (f) Building Permits—Monthly Record.

EXTERNAL TRADE (IMPORTS AND EXPORTS)—

- (1) Annual Report of the Trade of Canada; (2) Preliminary Annual Report of the Trade of Canada; (3) Monthly Report of the Trade of Canada; (4) Monthly Bulletins on Trade Statistics as follows: General—(a) Abstract of Imports, Exports and Duty Collected, by Latest Month, Accrued Period, and Latest 12 Months; (b) Summary of Trade by Countries and Principal Commodities, Latest 12 Months; (c) Summary of Trade with United Kingdom, Principal Commodities, Latest Month and 12 Months; (d) Summary of Trade with United States, Principal Commodities, Latest Month and 12 Months. Special—(a) Summary, Exports Grain and Flour; (b) Exports of Milk, Milk Products and Eggs; (c) Exports of Pulpwood, Wood Pulp and Paper; (d) Exports of Rubber Goods and Insulated Wire; (e) Exports of Vehicles of Iron (Automobiles, Bicycles, Railway Cars, etc.); (f) Imports and Exports of Footwear (except rubber); (g) Exports of Meat.

INTERNAL TRADE—*Grain—*

- (1) Annual Report on the Grain Trade of Canada; (2) Weekly Report on the Grain Movement; (3) Monthly Report on Mill Grind; (4) Special historical report on Flour-Milling Industry, 1605-1923.

Live Stock, etc.—

- (1) Annual Report on Live Stock and Animal Products; (2) Monthly Report on Stocks in Cold Storage.

Prices—

- (1) Annual and Monthly Reports on Wholesale and Retail Prices and Price Indexes.
- (2) Prices of Securities.

Other—

- Monthly Report of Visible Supply of Raw and Refined Sugar.

TRANSPORTATION, COMMUNICATIONS AND PUBLIC UTILITIES—*Railways and Tramways—*

- (1) Annual Report on Railway Statistics; (2) Annual Report on Electric Railway Statistics; (3) Monthly Bulletin on Railway Revenues, Expenses, Incomes and Operating Statistics; (4) Monthly Statement of Traffic of Railways; (5) Weekly Report of Carloadings of Revenue Freight.

Express—

- Annual Report on Express Statistics.

Telegraphs—

- Annual Report on Telegraph Statistics.

Telephones—

- Annual Report on Telephone Statistics.

Water Transportation—

- (1) Annual Report on Canal Statistics; (2) Monthly Report on Canal Statistics; (3) Report of Census of Canadian Registered Ships.

Electric Stations—

- Annual Report on Central Electric Stations in Canada.

Motor Vehicles—

- Annual Report on Motor Vehicle Registrations.

FINANCE—

- ✓ (1) Annual Report on Provincial Finance; (2) Annual Statistics of Urban Municipalities of 5,000 population and over; (3) Annual Statistics of Urban Municipalities of 1,000 to 5,000 population; (4) Special Bulletins on Assessed Valuations by Provinces, Municipal Bonded Indebtedness, etc.; (5) Statement of Civil Service Personnel and Salaries in the months of January 1912-1924.

JUSTICE—

- Annual Report on Criminal Statistics.

EDUCATION—

- (1) Annual Report on Education Statistics; (2) Annual Statistics of Business Colleges; (3) Annual Statistics of Private Elementary and Secondary Schools; (4) Statistics of Universities and Colleges; (5) Report on Playgrounds, etc., in Canada; (6) Historical Statistical Survey of Education in Canada; (7) Library Statistics of Canada, 1920-21; (8) Report of Conference on Education Statistics, held October 27-28, 1920.

GENERAL—

National Wealth.—Estimates of the National Wealth of Canada, by Provinces, Industries, etc.

Employment.—Monthly and Annual Reports on Employment, with Index Numbers of Employment by Localities and Industries.

Commercial Failures.—Monthly and Annual Reports.

Bank Debts.—Monthly and Annual Reports of Bank Debts to Individual Accounts at the Clearing House Centres of Canada.

The Canada Year Book, 1921, with frontispiece "The Arms of Canada," map of Canada and Newfoundland, a Statistical Summary of the Progress of Canada since 1871, and maps and diagrams, pp. i-xxiii, 1-909.

Contents: I. The Constitution and Government of Canada, by S. A. Cudmore, B.A. (Tor.), M.A. (Oxon.), F.S.S., F. R. Econ. Soc., Editor, *Canada Year Book*. II. Provincial and Local Government in Canada; Maritime Provinces, Quebec, Ontario, Manitoba, Saskatchewan, Alberta and British Columbia, by various writers. III. Chronological History of Canada. IV. Physical Characteristics of Canada, including special articles on Geology and Economic Minerals, Geology in Relation to Agriculture in Canada, the Flora of Canada, the Faunas of Canada, and Economic Geology of Canada, 1920-21. V. Area and Population. VI. Education. VII. Climate and Meteorology, including article on the Climate of Canada since Confederation. VIII. Production, including article on the Development of Agriculture in Canada. IX. Trade and Commerce. X. Transportation and Communications. XI. Labour, Wages and Prices. XII. Finance. XIII. Administration. XIV. Legislation and Principal Events of the Year 1921. XV. Extracts from the *Canada Gazette*.

The Canada Year Book, 1922-23: The official annual of the Physiography, Resources, History, Institutions and Social and Economic Conditions of the Dominion, with Map of Canada and Newfoundland, a Statistical Summary of the Progress of Canada, maps, diagrams, etc.

Contents: I. Physical Characteristics of Canada, (Geographical Features, Geology, Seismology, Flora, Faunas, Natural Resources, Climate and Meteorology). II. History and Chronology. III. The Constitution and General Government of Canada. IV. Provincial and Local Government in Canada. V. Parliamentary Representation in Canada. VI. Population, (Census, Vital Statistics, Immigration). VII. Production, (General Survey of Production, Agriculture, Forestry, Fur Trade, Fisheries, Mining, Water Powers, Manufactures, Construction). VIII. Trade and Commerce, including External and Internal Trade. IX. Transportation and Communications, (Steam Railways, Electric Railways, Motor Vehicles, Air Navigation, Canals, Shipping, Navigation, Telegraphs, Telephones, Express, Post Office). X. Labour, Wages and Prices. XI. Finance, Public and Private (Currency, Banking, Insurance, etc.). XII. Education. XIII. Administration, (Public Health, Hospitals and Charities, Justice, Public Lands, Public Defence, Public Works, Indian Administration, etc.). XIV. Sources of Statistical and other Information Relative to Canada. XV. Annual Register for 1922-23, (Dominion and Provincial Legislation, Principal Events, Obituary Government Appointments, etc.).

The Canada Year Book, 1924: The official statistical annual of the Physiography, Resources, History, Institutions and Social and Economic Conditions of the Dominion, with a Statistical Summary of the Progress of Canada, maps, diagrams, etc.

Contents: I. Physical Characteristics of Canada, (Geographical Features, Geological Formation, Seismology, Flora, Faunas, Natural Resources, Climate and Meteorology). II. History and Chronology, (History, Chronological History). III. Constitution and Government, (The Constitution and General Government of Canada, Provincial and Local Government in Canada, Parliamentary Representation in Canada). IV. Population, (Growth and Distribution, Vital Statistics, Immigration). V. Production, (General Survey of Production, Agriculture, Forestry, Fur Trade, Fisheries, Mining, Water Powers, Manufactures, Construction). VI. Trade and Commerce, (External and Internal Trade). VII. Transportation and Communications, (Steam Railways, Electric Railways, Express, Roads and Highways, Motor Vehicles, Air Navigation, Canals, Shipping and Navigation, Telegraphs, Telephones, Post Office). VIII. Labour, Wages and Prices. IX. Finance, (Public, including Dominion, Provincial, Municipal, National Wealth and Income; Private, including Currency, Banking, Insurance and Commercial Failures). X. Education. XI. Public Health and Benevolence. XII. Administration, (Public Lands, Public Defence, Public Works, Indians of Canada, Soldiers' Civil Re-establishment, Miscellaneous Administration). XIII. Sources of Official Statistical and other Information Relative to Canada. XIV. Annual Register, 1924, (Dominion and Provincial Legislation, Principal Events, Obituary, Government Appointments, etc.)

II.—ACTS ADMINISTERED BY DOMINION DEPARTMENTS.

List of the Principal Acts of Parliament administered by Departments of the Government of the Dominion of Canada, as compiled from information supplied by the respective Departments.

(Numbers within parentheses denote chapters of the Revised Statutes of Canada, 1906—R.S.C., 1906.)

Agriculture.—Experimental Farm Stations; Fruit Act; Dairy Industry; Cold Storage; Cold Storage Warehouse; Seed Control; Feeding Stuffs; Live Stock Pedigree; Live Stock and Live Stock Products; Animal Contagious Diseases; Meat and Canned Foods; Destructive Insect and Pest; Dairy Produce Act; Fertilizers Act; Root Vegetables; Section 235, Criminal Code (Race Track Betting).

Civil Service Commission.—An Act to amend the Civil Service Superannuation and Retirement Act (13-14 Geo. V, c. 8); An Act to amend the Public Service Retirement Act (13-14 Geo. V, c. 5).

Customs and Excise.—Customs Tariff; Customs; Canada Shipping (in part); Infectious and Contagious Diseases affecting Animals (in part); Destructive Insect and Pest (in part); Export; Copyright (in part); Petroleum and Naphtha; Inland Revenue; Special War Revenue, 1915; Income War Tax Act, 1917.

External Affairs.—The functions and duties of this Department are defined by the Department of External Affairs Act, 1912, (2 Geo. V, c. 22) and by the International Boundary Waters Treaty Act, 1911 (1-2 Geo. V, c. 28), as amended by the statute of April 3, 1914 (4 Geo. V, c. 5).

Finance.—Department of Finance and Treasury Board; Appropriation; Superannuation and Retirement; Contingencies; Consolidated Revenue and Audit; Currency; Ottawa Mint; Dominion Notes; Provincial Subsidies; Bank; Savings Bank; Penny Bank; Quebec Savings Banks; Bills of Exchange; Interest; The Special War Revenue Act, 1915, and amendments (in part); Finance Act; Ottawa Improvement Commission Act.

Health.—Quarantine Act (74); Public Works Health Act (135); Leprosy Act (136); Canada Shipping Act (Sick and Distressed Mariners) (113); Proprietary or Patent Medicines Act (7-8 Edw. VII, c. 56); Opium and Narcotic Drug Act; an Act respecting Food and Drugs; an Act respecting Honey; an Act respecting Maple Products.

Indian Affairs.—The Indian Act, 1906, with amendments to date.

Interior.—Department of the Interior; Dominion Lands; Dominion Lands Surveys; Forest Reserves and Parks; Irrigation; Railway Belt; Railway Belt Water; Yukon; Yukon Placer Mining; Dominion Water Power; Land Titles; Northwest Game; Northwest Territories; Ordnance and Admiralty Lands; Reclamation; Seed Grain; Migratory Birds Convention Act; Manitoba Supplementary Provisions Act; Saskatchewan and Alberta Roads Act.

Justice.—Department of Justice (21); Solicitor-General's (22); Northwest Territories (62); Yukon (63); Dominion Police (92); Judges (138); Supreme Court (139); Exchequer Court (140); Admiralty (141); Petition of Right (142); Criminal Code (146); Penitentiary (147); Prisons and Reformatories (148); Identification of Criminals (149); Ticket of Leave (150); Fugitive Offenders (154); Extradition (155); Juvenile Delinquents (7-8 Edw. VII, c. 40, 1908); Bankruptcy (c. 36, 1919).

King's Printer and Controller of Stationery.—Public Printing and Stationery (80) (10 Geo. V, c. 27, 1919).

Labour.—Conciliation and Labour (R.S.C. 1906, c. 96); Industrial Disputes Investigation (6-7 Edw. VII, 1907, c. 20); Fair Wages Resolution of the House of Commons; Employment Offices Co-ordination Act (8-9 Geo. V, c. 21); the Technical Education Act (9-10 Geo. V, c. 73); the Government Annuities Act, 1908; the Combines Investigation Act, 1923 (13-14 Geo. V, c. 9).

Marine.—Department of Marine and Fisheries; Government Vessels Discipline; Government Harbours and Piers; Canada Shipping and amending Acts (6-7 Geo. V, c. 12 and 13); Navigable Waters Protection; Quebec Harbour and River Police; Live Stock Shipping; an Act to amend the Vancouver Harbour Commissioners Act (6-7 Geo. V, c. 9); an Act transferring Rights and Powers in the Harbour of St. John, N.B., to a Board of three Commissioners approved by Order

in Council; The Vancouver Harbour Advances Act, 1919; an Act fixing the rate of interest to be paid on loans by His Majesty to the Harbour Commissioners of Montreal and Quebec; an Act to amend the Canada Shipping Act (Transfers and Mortgages of Ships), passed during the session of 1919-20; Canada Shipping Acts (10-11 Geo. V, cc. 5, 6, 23, 38 and 70) relating respectively to certificates of service, steamboat inspection, pilotage, sick and distressed mariners, and shipbuilding; an Act to extend the time for the payment of certain debentures issued by the Harbour Commissioners of Montreal (11-12 Geo. V, c. 11); an Act to amend the Canada Shipping Act (11-12 Geo. V, c. 19); an Act respecting the Lake of the Woods and other waters (11-12 Geo. V, c. 38); an Act to amend the Canada Shipping Act (Examination of Masters) (13-14 Geo. V, c. 5); an Act to amend the Radiotelegraph Act (13-14 Geo. V, c. 26); an Act to provide for further advances to the Vancouver Harbour Commission (13-14 Geo. V, c. 29); an Act to amend the Canada Shipping Act (Foreign Control) (13-14 Geo. V, c. 35); an Act to amend the Canada Shipping Act (Coasting Laws) (13-14 Geo. V, c. 36); an Act to provide for further advances to the Montreal Harbour Commission (13-14 Geo. V, c. 59); an Act respecting the Three Rivers Harbour Commission (13-14 Geo. V, c. 71).

Mines.—Geology and Mines (6-7 Edw. VII, 1907, c. 29); Explosives (4-5 Geo. V, 1914, c. 31).

National Defence.—*Militia and Defence.*—Militia Act; Royal Military College Act; Militia Pension Act; Sections 85 and 86 of the Criminal Code; the Air Board Act; Army Act; Regimental Debts Act; the National Defence Act, 1922. *Naval Service.*—Naval Service Act (9-10 Edward VII, c. 43); Naval Discipline; Dominion Naval Forces Act (8-9 George V, c. 34); the National Defence Act, 1922.

Post Office.—Post Office; Pacific Cable; Parcel Post; Special War Revenue (in part).

Public Works of Canada.—Public Works (39) and amendments (8-9 Geo. V, 1918, c. 37); Government Harbours and Piers, s. 5 (112); Navigable Waters Protection, s. 7 (115) and amendments (8-9 Geo. V, 1918, c. 33); Telegraph Secrecy (126); Dry Dock Subsidies (9-10 Edw. VII, 1910, c. 17); an Act to amend the Navigable Waters Protection Act (9-10 Edw. VII, 1910, c. 44); an Act to authorize the payment of a subsidy to the Collingwood Shipbuilding Co., Ltd. (2 Geo. V, 1912, c. 17); an Act to amend the Dry Dock Subsidies Act, 1910, (2 Geo. V, 1912, c. 20); an Act to amend the Government Works Toll Act, R.S.C., 1906, c. 40 (2 Geo. V., 1912, c. 26); an Act to incorporate the National Gallery of Canada (3-4 Geo. V, 1913, c. 33); an Act to authorize the payment of a subsidy to the Western Dry Dock and Shipbuilding Co., Ltd. (3-4 Geo. V, 1913, c. 57); Acts to amend the Dry Dock Subsidies Act, 1910, (4-5 Geo. V, 1914, c. 29, 7-8 Geo. V, 1917, c. 27 and 9-10 Geo. V, 1919, c. 51); Act to confirm an agreement between His Majesty the King and the Corporation of the City of Ottawa (10-11 Geo. V, c. 15); Ferries Act, R.S.C., 1906, c. 108, transferred by Order in Council, 3rd June, 1918, for administration by Public Works Department.

Railways and Canals.—Department of Railways and Canals (35); Government Railways (36); Intercolonial and P.E.I. Railway Employees' Provident Fund (6-7 Edw. VII, c. 22); The Government Railways Small Claims (9-10 Edw. VII, c. 26); amendments to foregoing Acts; Acts to amend the National Transcontinental Railway Act (4-5 Geo. V, c. 43 and 5 Geo. V, c. 18) and to amend the Government Railway Act and authorize the purchase of certain Railways (5 Geo. V, c. 16); an Act to incorporate the Canadian National Railway Company and respecting Canadian National Railways (9-10 Geo. V, c. 13) and amending Act (10-11 Geo. V, c. 39); an Act to provide compensation where employees of His Majesty are killed or suffer injuries while performing their duties (8-9 Geo. V, c. 15) and amending Act (9-10 Geo. V, c. 14); the Canada Highways Act (9-10 Geo. V, c. 54) and amending Act (13-14 Geo. V, c. 4); the acquisition of the preference and common stock of the Grand Trunk Railway Company of Canada (10 Geo. V, c. 17, 10-11 Geo. V, c. 13 and 11-12 Geo. V, c. 9).

The Railway Act, 1919 (Companies) (9-10 Geo. V, c. 68) confers certain powers upon the Minister of the Department. In the case of subsidized railways, the authorizing Acts are carried out under the Department, which has also certain jurisdiction where government guarantee has been given.

The Act 9-10 Geo. V, c. 22, as amended by 10 Geo. V, c. 16, confirms two Orders in Council, dated March 7, 1919, and March 13, 1919, appointing the Minister of this Department receiver of the Grand Trunk Pacific Railway system.

Secretary of State.—Companies; Naturalization; Canada Temperance; Boards of Trade; Ticket of Leave; Trade Unions; Treaties of Peace; War Charities, 1917.

Trade and Commerce.—Grain Act Consolidation; Electricity and Fluid Exportation; Electricity Inspection; Electrical Units; Gold and Silver Marking; Gas Inspection; Inspection and Sale; Inspection of Water Meters; Petroleum Bounty; Statistics; Timber Marking; Weights and Measures Inspection; Copyright Act; Cullers Act; Patent Act; Trade Mark and Design Act; Inland Water Freight Rates; Hemp Bounty; Copper Bars or Rods Bounty.

III.—PUBLICATIONS OF DOMINION DEPARTMENTS.

List of Principal Publications of the Departments of the Government of the Dominion of Canada, as compiled from information supplied by the respective Departments.

Agriculture.—Annual Reports of the Minister, of the Experimental Farms and Stations, of the Veterinary Director-General and of the Entomological Branch. Bulletins, pamphlets and circulars of the Experimental Farms Branch on a great variety of agricultural subjects, including publications of the following nine divisions: Field Husbandry; Animal Husbandry; Horticulture; Cereal; Chemistry; Forage Plants; Botanical; Poultry; and Tobacco. Seasonable Hints are issued three times a year. Bulletins of the Dairy and Cold Storage Branch relating to the dairying and cold storage industries in Canada, the making of butter and cheese, cow testing, dairying experiments, co-operation, etc. Reports, bulletins, pamphlets, etc., of the Live Stock Branch on cattle, sheep, swine, poultry, marketing of eggs, wool, etc. Bulletins of the Health of Animals Branch, with regulations as to contagious abortion; rabies; sheep scab; actinomycosis; anthrax; glanders; hog cholera; *maladie du coit*; tuberculosis; foot-and-mouth disease; quarantine; and meat inspection. Bulletins and reports of the Seed Branch as to seed-testing, the production and use of seed grains, the Seed Control Act, the Feeding Stuffs Act and the Fertilizers Act. Bulletins and circulars of the Entomological Branch and instructions to importers of nursery stock. Reports of the Canadian Seed Growers' Association. Fodder and Pasture Plants, by George H. Clark, B.S.A. and M. Oscar Malte, Ph.D., 143 pages, 27 plates, price 50 cents. Bulletin on the Maple Sugar Industry; Publications Filing System.

Dominion Experimental Farms.—(1) Report of the Director (contains summary of reports of Divisions, Farms and Stations); (2) Animal Husbandry Division; (3) Bee Division; (4) Botanical Division; (5) Chemistry Division; (6) Field Husbandry Division; (7) Illustration Stations Division; (8) Poultry Division; (9) Tobacco Division; (10) Horticultural Division; (11) Cereal Division; (12) Forage Crops Division. *Experimental Farms and Stations Reports:* (13) Agassiz, B.C.; (14) Indian Head, Sask.; (15) Nappan, N.S.; (16) Charlottetown, P.E.I.; (17) Invermere, B.C.; (18) Sidney, B.C.; (19) Brandon, Man.; (20) Morden, Man.; (21) Cap Rouge, Que.; (22) Scott, Sask.; (23) Swift Current, Sask.; (24) Kapuskasing, Ont., and La Ferme, Que.; (25) Kenville, N.S.; (26) Lennoxville, Que.; (27) Ste. Anne de la Pocatière, Que.; (28) Rosthern, Sask.; (29) Lethbridge, Alta.; (30) Lacombe, Alta.; (31) Summerland, B.C.; (32) Experimental Sub-stations—Beaverlodge, Alta.; Fort Vermilion, Alta.; Grouard, Alta.; Fort Resolution, N.W.T.; Swede Creek, Yukon; Salmon Arm, B.C.

The pamphlet entitled "List of Publications" contains a list of the publications of the Department, numbering more than three hundred. These publications include, in addition to the reports, bulletins and pamphlets on field crops, live stock, dairying, orchard and garden insects and plant diseases, poultry and miscellaneous topics. With few exceptions, the publications of the Department are free on application to its Publications Branch.

Auditor-General.—Annual Report.

Civil Service Commission.—Annual Report, including lists of permanent appointments, promotions and transfers; Classification of the Civil Service of Canada, revised up to Sept. 1st, 1923; Regulations of the Civil Service Commission; general information respecting Civil Service Examinations.

Customs and Excise.—Annual report containing Tables of Imports, Exports, Customs and Inland Revenue. Annual Report of Shipping.

External Affairs.—Annual Report.

Finance.—Annual Reports of the Public Accounts of the Dominion of Canada. Monthly Statements of the Chartered Banks of Canada. Estimates.

Insurance.—Quarterly Statement showing List of Licensed Companies. Annual Abstract of Statements of Insurance Companies in Canada (subject to correction). Annual Reports of the Insurance Department, Vol. I (Fire and Miscellaneous), Vol. II (Life Companies). Annual List of Securities held by Insurance Companies in Canada, with Department's Valuation thereof. Abstract of statements of Loan and Trust Companies in Canada. Annual Report of Loan and Trust Companies incorporated by the Dominion.

Interior.—Annual Report, including Reports from the Dominion Lands Surveys, Canadian National Parks, Forestry, Water Power and Reclamation, Northwest Territories and Yukon, and Natural Resources Intelligence Branches and the Dominion Observatories. Pamphlets, reports, bulletins, etc., of the respective branches:

Canadian National Parks.—Annual Report of the Commissioner; Traffic and Motor Regulations; Banff Information; Through the Heart of the Rockies and Selkirk; The Banff-Windermere Highway; Guide to Jasper National Park; Glaciers of the Rockies and Selkirk; Automobile and Livery Tariffs for Rocky Mountains and Kootenay National Parks; Automobile and Livery Tariffs for Yoho and Glacier National Parks; Automobile and Livery Tariffs for Jasper National Park; Map of Rocky Mountains National Park; Map of Yoho National Park; Map of Glacier National Park; Map of Mount Revelstoke National Park; Map of Waterton Lakes National Park; Map of Central Part of Jasper National Park; Map of Banff and vicinity; Migratory Birds Convention Act and Regulations; Abstract of Regulations; Bird Houses and their Occupants; Lessons on Bird Protection; Attracting Birds with Food and Water; Hints for Hunters; Loi et Règlements concernant les Oiseaux Migrateurs; Résumé des Règlements; Maisons d'Oiseaux et leurs Occupants; Leçons concernant la Protection des Oiseaux; L'Art d'attirer les Oiseaux; Historic Sites Series No. 1, The Lake Erie Cross, French and English; H.S. Series No. 2, Guide to Fort Chambly, French and English; H.S. Series No. 3, Guide to Fort Lennox, French and English; H.S. Series No. 4, Guide to Fort Anne, English; H.S. Series No. 5, Fort Sainte Marie II, English.

Commission of Conservation.—The Commission of Conservation was amalgamated in 1921 with other branches carrying on similar work in the different departments.

Dominion Observatory.—Publications of Dominion Observatory, Vol. V: No. 8, A Spectroscopic Study of Early Class B Stars (Third Paper), by F. Henroteau, D.Sc.; No. 9, The Location of Epicentres, 1919, by W. W. Doxsee, M.A.; No. 10, Gravity, by A. H. Miller, M.A.; No. 11, The Spectroscopic System Delta Ceti (First Paper), by F. Henroteau, D.Sc.; Vol. VI, Spectroscopic Investigations of the Sun, Part I, General Outline of Observations, Instruments, and Methods—Sections 1-5, by Ralph E. DeLury, Ph.D., and Section 6, by Ralph E. DeLury and J. L. O'Connor; Vol. VIII, No. 1, The Spectroscopic System Theta Ophiuchi, by F. Henroteau, D.Sc.; No. 2, The Location of Epicentres, 1920, by W. W. Doxsee, M.A.; No. 3, The Spectroscopic System Beta Canis Majoris, by F. Henroteau, D.Sc.; No. 4, The Spectroscopic System Sigma Scorpii (Second Paper), by F. Henroteau, D.Sc.; No. 5, A Spectroscopic Study of Stars of Classes A and F, by F. Henroteau, D.Sc.; No. 6, Gravity in Northwestern Canada, by A. H. Miller, M.A. (See also Year Books, 1919, pp. 630-631; 1921, pp. 838-839.)

Forestry.—Annual Reports of the Director of Forestry, 1914-15-17-18-19-21-22-23. *Bulletins:* (1) Tree-planting on the Prairies; (49) Treated Wood-block Paving; (59) Canadian Woods for Structural Timbers; (60) Canadian Douglas Fir; Its Mechanical and Physical Properties; (61) Native Trees of Canada (price

50 cents, post free); (63) Wood-using Industries of Quebec; (66) Utilization of Waste Sulphite Liquor (price 50 cents, post free); (67) Creosote Treatment of Jack Pine and Eastern Hemlock for Cross-ties; (68) Forest Fires in Canada, 1917; (69) The Care of the Woodlot; (70) Forest Fires in Canada, 1918; (71) Canadian Sitka Spruce; Its Mechanical and Physical Properties; (72) Success in Prairie Tree-planting; (73) Tree-repairing; (74) Distillation of Hardwoods in Canada (price 25 cents, post free); (75) Wood-using Industries of Ontario (1924); (76) Pulping Qualities of Fire-killed Wood. *Circulars*: (6) Preservative Treatment of Fence Posts; (8) The Forest Products Laboratories; (9) Chemical Methods for Utilizing Wood Wastes; (12) The Empire Timber Exhibition; (13) The Cascara Tree in British Columbia; (14) Commercial Forest Trees of Canada; (15) Historical Sketch of Canada's Timber Industry; (17) Forest Investigative Work of the Dominion Forest Service. *Tree Pamphlets*: (1) White Pine; (2) White Spruce; (3) Douglas Fir; (4) Hemlock (Eastern); (5) Western Hemlock; (6) Red Pine. *Manual*: Methods of Communication Adapted to Forest Protection (price \$1, post free). Dominion Forestry Branch Message Code (price 10 cents, post free). Talking Trees and Canadian Forest Trees (Juvenile). The Tree Planting Division; Its History and Work. The Forests of Canada. Summary Report of the British Empire Forestry Conference, 1923.

Mining Lands Branch.—A two-sheet map of Alberta, showing the coal-mining rights disposed of; a map of southern Saskatchewan, showing coal rights disposed of; Yukon Placer Mining Act; Quartz Mining Regulations; Coal Mining Regulations; Placer Mining Regulations; Quarrying Regulations; Petroleum and Natural Gas Regulations; Potash Regulations; Dredging Regulations relating to the Yukon Territory; Dredging Regulations relating to beds of rivers outside of the Yukon Territory; Regulations relating to bar-digging on the North Saskatchewan river; Regulations for the issue of oil and gas permits in the Northwest Territories; Alkali Mining Regulations; Regulations for the issue of permits to mine coal for domestic purposes; Regulations for the issue of permits to remove sand, stone and gravel from the beds of rivers and lakes; Carbon Black Regulations.

Natural Resources Intelligence Service.—*Maps*: Railway Map of Canada, in four sheets, also in one-sheet form; Resource Map of Canada; Highways Map of Nova Scotia; Vegetation and Forest Cover Map of Canada; Economic Atlas; Land Maps of Northern Alberta, South Alberta, Saskatchewan and Manitoba; Small Land Map of Manitoba, Saskatchewan and Alberta; Elevator Map of Manitoba, Saskatchewan and Alberta; Land Registration and Judicial Districts Map of Manitoba, Saskatchewan and Alberta; Bank Maps of Ontario and Quebec, and Manitoba, Saskatchewan and Alberta; Fisheries Map of the Atlantic Coast; Map of the World; Cereal Map of Alberta; British Columbia Railway Belt Homestead Map, Western Sheet; Explorations in Northern Canada; Land District Maps of Dauphin, Winnipeg, Battleford, Prince Albert, Calgary, Edmonton, Grande Prairie and Peace River Land Agencies; Map of Yukon Territory; Map of Kluane, White and Alsek Rivers District, Yukon Territory; Standard Topographical Sheets—Sault Ste. Marie, Sudbury, Rainy River, English River, Lake Nipigon, Michipicoten, Mattagami, Nipissing, Windsor, London, Guelph, Hamilton, Toronto, Belleville, Kingston, Gowanda, Manitoulin, French River, Cartier, Timiskaming, Parry Sound, Pembroke, Ottawa, Cornwall, Prince Edward Island, Gatineau, Montreal-Quebec, Montmagny, Harricana, Chibougamau, Roberval, Tadoussac, Bonaventure, Gaspé, Blanc Sablon, Montreal, Sherbrooke, New Brunswick, Truro, Halifax, Moncton, Cape Breton, Yarmouth. *Reports*: v Compact Facts; Natural Resources Intelligence Service; Unexploited West; Agricultural Loans; Central British Columbia; Manitoba, its development and opportunities; Farming Industry in Manitoba; Industry and Commerce in Manitoba; Natural Resources of Manitoba; Saskatchewan, its development and opportunities; Peace River District; New Oil Fields of Northern Canada; Oil and Gas in Western Canada; The Resources of Nova Scotia; The Maxwellton District of Nova Scotia; The Province of New Brunswick; Lists of Unoccupied Farms for Sale in Manitoba, Saskatchewan, Alberta, Nova Scotia, New Brunswick and Prince Edward Island; Natural Resources of the Prairie Provinces; Resources of Quebec.

Northwest Territories and Yukon.—North West Territories Act; North West Territories Ordinances; North West Game Act (with regulations); North West Territories Timber Regulations; North West Territories Hay and Grazing Regu-

lations; North West Territories Oil and Gas Regulations; Manual for operators under Oil and Gas Regulations; Report of Royal Commission upon the possibilities of the Reindeer and Musk-Ox Industries in the Arctic and Sub-Arctic Regions of Canada; Canada's Arctic Islands; Canada's Wild Buffalo; Local Conditions in the Mackenzie District, 1922; Mining Development in the Mackenzie District, 1922; Map of the North West Territories, scale 100 miles to the inch, showing game preserves; The Yukon Act; Yukon Land Regulations; Yukon Homestead Regulations; Yukon Hay and Grazing Regulations; Yukon Timber Regulations.

Topographical Survey of Canada.—(1) Annual Report of the Topographical Survey of Canada, and accompanying maps. Price 5c. (2) Manual of Instructions for the Survey of Dominion Lands. Price 50c. Supplement to the Manual. Price 50c. (3) Rules and Regulations of the Board of Examiners for Dominion Land Surveyors, and programme of the subjects of the various examinations. (4) The Selkirk Range (in two volumes), by A. O. Wheeler, F.R.G.S. Price \$1. (5) Copying Camera of the Surveyor-General's Office. (6) Photographic Methods Employed by the Canadian Topographical Survey, by A. O. Wheeler, F.R.G.S. (7) Precise Measuring with Invar Wires and the Measurement of the Kootenay Base, by P. A. Carson, D.L.S. (8) Report on Levelling Operations, from 1908 to 1914, by J. N. Wallace, D.L.S. Price 35c. (9) Triangulation of Part of the Railway Belt of British Columbia, by H. Parry, D.L.S. (10) Description, Adjustments and Methods of Use of the 6-inch Micrometer Block Survey Reiterating Transit Theodolite, by W. H. Herbert, B.Sc. (11) Papers on Description for Deeds. (12) Descriptions of the townships surveyed in the different Provinces, issued yearly since 1909. (13) Description of the surveyed townships in the Peace River District. (14) Description of lands comprised within the Fort Pitt Sectional Map, consisting of townships 49 to 56, ranges 15 to 28, west of the third meridian. (15) Description of Surveyed Lands in the Railway Belt of British Columbia (in three parts). (16) Extracts from Reports on townships east of the principal meridian, received from surveyors to July 1, 1914. (17) Extracts from Reports on townships 1 to 16 west of the principal meridian, received from surveyors to July 1, 1914. (18) Extracts from Reports on townships 17 to 32 west of the principal meridian, received from surveyors to July 1, 1914. (19) Extracts from Reports on townships 33 to 88 west of the principal meridian, received from surveyors to March 31, 1915. (20) Extracts from Reports on townships 1 to 16 west of the second meridian, received from surveyors to March 31, 1915. (21) Astronomical field tables for use of Canadian land surveyors, showing the altitude and azimuth of the pole star. (22) Explanation of the Astronomical Field Tables for the use of the land surveyors of Canada. (23) Tests of small telescopes at the laboratory of the Dominion Lands Survey. (24) Alberta and British Columbia Boundary, Part I, 1913 to 1916. Price 50c. Report and Atlas, \$1. (25) Description of and Guide to Jasper Park. Price 50c. (26) The testing of Aneroid Barometers at the laboratory of the Dominion Lands Survey. (27) Testing of time-pieces at the laboratory of the Dominion Lands Survey. (28) Description of Boundary Monuments erected on surveys of Dominion Lands, 1871-1917, by H. L. Seymour, D.L.S. (29) Standardization of measures of length at the laboratory of the Dominion Lands Survey. (30) The testing of thermometers at the laboratory of the Dominion Lands Survey. (31) Descriptions of townships between the third and fourth meridians, 1886. (32) Descriptions of the townships west of the fourth and fifth meridians, 1886. (33) The Lac La Biche District, Alberta, a guide for intending settlers. Bulletin No. 47. (34) Elevations of lakes in Manitoba, Saskatchewan and Alberta, by J. N. Wallace, D.L.S. Bulletin No. 55. (35) Reprint of a report on an exploratory survey between Great Slave lake and Hudson bay, with accompanying maps, by J. W. Tyrrell, D.L.S., 1901. (36) Bench marks established along certain meridians, base lines and township outlines in Alberta, by J. N. Wallace, D.L.S. Bulletin No. 53. *Maps:* (37) Township plans, price 10c.; (38) Plans of parishes, townplots and settlements, 25c. to \$1; (39) Sectional maps of Western Provinces and Yukon Territory, price 5c.; (40) New style sectional maps in greater detail, showing roads, telephones, buildings, etc., price 25c.; (41) Mount Robson and mountains north of Yellowhead pass; (42) Banff and vicinity; (43) Central part of Jasper Park, in 6 sheets, price 15c. per sheet; (44) Map of the same area, in 1 sheet; (45) Crownstest Forest and Waterton Lakes Park, in 5 sheets, price 10c. per sheet; (46) Waterton Lakes Park; (47) Magnetic maps; (48) Alberta-British Columbia boundary maps, price 10c. per sheet; (49) Land classification maps of the fol-

lowing districts—Peace River, The Peace River Block, St. Paul de Metis, Northeast of Prince Albert, Winnipegosis, Lac la Biche, Pouce Coupé, Melfort, Whitecourt and Athabaska; (50) Mining districts of Rice lake and Flinflon lake, price 5c. each; (51) Northern Selkirk mountains and the Big Bend of the Columbia; (52) Mackenzie and Slave rivers, in 14 sheets; (53) Alberta, showing elevations, north sheet, scale 1 inch to 12½ miles; (54) Monograph showing duration of sunlight for every day in the year for all places between Lat. 25° N. and 60° N.; (55) Lines of equal magnetic declination and of equal annual change in Canada for 1922; (56) Maps showing main soil types in the following districts: Fort St. John; district south of Melfort; Pouce Coupé, northeast Prince Albert; Athabaska; and Mid-Lake. (57) Rocky Mountains Park; (58) Mount Revelstoke Park, B.C.; (59) Glacier Park, B.C.; (60) List of maps and publications issued by the Topographical Survey of Canada. (Publications of the Topographical Survey of Canada may be obtained on application to the Distribution Office, Department of Public Printing and Stationery for No. 1; to the Secretary, Board of Examiners for Dominion Land Surveyors, for No. 3; and to the Surveyor-General for the other numbers.)

Dominion Water Power and Reclamation Service.—I. Water Power: Annual Reports of the Dominion Water Power Branch from 1912-13 to 1922-23. The Annual Reports of the Branch previous to 1913 are included in the Annual Report of the Department. Water Resources Papers: 1. *Reports of Special or General Interest*: 2, Report on Bow River Power and Storage Investigations, by M. C. Hendry; 3, Report on Power and Storage Investigations, Winnipeg River, by J. T. Johnston; 5 and 11, Preliminary and final Report on the Pasquia Reclamation Project, by T. H. Dunn; 6, Report on Cost of Various Sources of Power for Pumping, in connection with the South Saskatchewan Water Supply Diversion Project, by H. E. M. Kensit; 7, Report on the Manitoba Water Powers, by D. L. McLean, S. S. Seovil and J. T. Johnston; 10, General Guide for Compilation of Water Power Reports of Dominion Water Power Branch, prepared by J. T. Johnston; 12, Report on Small Water Powers in Western Canada and discussion of Sources of Power for the Farm, by A. M. Beale; 13, Report on the Coquitlam-Buntzen Hydro-Electric Development, by G. R. G. Conway; 16, Water Powers of Canada, a series of five pamphlets prepared for distribution at the Panama-Pacific Exposition, 1915, by G. R. G. Conway, P. H. Mitchell, H. G. Acres, F. T. Kaelin and K. H. Smith; 17, Canadian Hydraulic Power Development and Electric Power in Canadian Industry, by C. H. Mitchell; 20, Report on the Interest Dependent on Winnipeg River Power, with special reference to the capital invested and the labour employed, by H. E. M. Kensit; 27 and 33, Directories of Central Electric Stations in Canada to January 1, 1922, by J. T. Johnston; 32, Water Resources Index Inventory, by J. T. Johnston. II. *Surface Water Supply Reports*: (A) Atlantic Drainage south of St. Lawrence river, including Nova Scotia, New Brunswick, Prince Edward Island and southeastern Quebec; 29 and 37, from 1919 to the climatic year ending September 30, 1922, by K. H. Smith; (B) St. Lawrence and southern Hudson Bay Drainage in Ontario; 28, 34, and 38, from 1919 to the climatic year ending September 30, 1922, by S. S. Seovil; (C) Arctic and western Hudson Bay Drainage (and Mississippi Drainage in Canada) in Alberta, Saskatchewan, Manitoba, extreme western Ontario, and Northwest Territories; 4, 19, 22, 24, 26, 31, 36 and 40, from 1912 to the climatic year ending September 30, 1922, by M. C. Hendry (to 1918) and C. H. Attwood and A. L. Ford. (Previous to 1919-20, surveys in Alberta and Saskatchewan were carried on and published by the Reclamation Service, Department of the Interior); (D) Pacific Drainage in British Columbia and the Yukon Territory; 1, 8, 14, 18, 21, 23, 25, 30, 35 and 36, from 1911 to the climatic year ending September 30, 1922, by P. A. Carson (to 1912) and R. G. Swan.

II. Reclamation: Irrigation Reports, 1912 to 1918-19; Annual Reports of the Reclamation Service, 1919-20 to 1922-23; Reports of the Western Canada Irrigation Association Conventions (1st to 11th Conventions); Report of the International Irrigation Congress, 1914. *Bulletins*: (1) Irrigation in Alberta and Saskatchewan; (2) Alfalfa Culture; (3) Climatic and Soil Conditions in C. P. Ry. Co's Irrigation Block; (4) Duty of Water Experiments and Farm Demonstration Work; (5) Farm Water Supply; (6) Irrigation Practice and Water Requirements for Crops in Alberta. *Pamphlets*: "Practical Information for Beginners in Irrigation," by W. H. Snelson. Address by S. G. Porter on "Practical Operation of Irrigation

Works." Address by Dr. Rutherford on "Inter-dependence of Farm and City." Addresses by Don H. Bark on "The Actual Problem that Confronts the Irrigator," "Practical Irrigation Hints for Alberta" and "Alfalfa Growing."

Immigration and Colonization.—Atlas of Canada, United Kingdom and United States editions. Eastern Canada, United Kingdom and United States editions. Canada West, United Kingdom and United States editions. Farm Opportunities in Canada. Report of the Chief Inspector of British Immigrant Children. Immigration Act and Regulations. A Manual of Citizenship. Annual Report.

Indian Affairs.—Annual Report. Indian Act, 1906, with amendments to date. Schedule of Indian Reserves, 1913. Indian Treaties and Surrenders, Vols. I, II, III.

Justice.—Annual Report of Superintendent of Penitentiaries.

Health.—(1) Sanitation, "Sewage Treatment for Isolated Houses and Small Institutions where Municipal Sewage System is not available." The Little Blue Books: (2) The Canadian Mother's Book; (3) How to Take Care of the Baby; (4) How to Take Care of the Mother; (5) How to Take Care of the Children; (6) How to Take Care of the Father and the Family; (7) Beginning our Home in Canada; (8) How to Build our Canadian House; (9) How to Make our Canadian Home; (10) How to make our Outpost Home in Canada; (11) How to Prevent Accidents and Give First Aid; (12) Canadians Need Milk; (13) How we Cook in Canada; (14) How to Manage Housework in Canada; (15) How to Take Care of Household Waste; (16) Household Cost Accounting in Canada. (17) Sanitation, "Water Supplies" (Unabridged edition); (18) Sanitation, "Water Supplies" (Homesteader's edition); (19) To-day's World Problem in Disease Prevention (Stokes). (20) General Circular of Information concerning Venereal Diseases; (21) Venereal Diseases—Wasserman Test; (22) Venereal Diseases—Microscopical Examination; (23) Venereal Diseases—Diagnosis and Treatment; (24) Information for Men—Syphilis and Gonorrhoea; (25) Information for Young Women about Sex Hygiene. (26) Information for Parents—Teaching of Sexual Hygiene to Children; (27) Prevention of Blindness in Babies.; (28) Venereal Diseases (Appendix to Diagnosis and Treatment) (Report of Medical Committee); (29) Simple Goitre; (30) How to build sound teeth; (31) What you should know about Tuberculosis.

King's Printer and Controller of Stationery.—The Canada Gazette, published weekly by authority, with occasional supplements and extras, subscription, \$5 per annum payable in advance, single copies 15 cents each. (Contains weekly a list of current Government publications, as required by Order in Council 1522). Judgments of the Board of Railway Commissioners, bi-monthly, \$3 per annum, single copies, 20 cents; Canada Law Reports, published monthly, yearly subscription, \$6. Dominion Statutes, 1923, \$4.50. Acts, Public and Private, with amendments to date, 10 cents to \$1.00 per copy. Canadian Postal Guide, 50 cents paper cover, \$1.00 cloth cover, yearly, supplements, 25 cents. Parliamentary Debates, "Hansard," issued daily during session, French and English, \$3 per session each for House of Commons and Senate Debates, single copies, 5 cents. Prices of blue-books are in nearly every case printed upon the front cover and are based practically on the cost of paper and presswork. They may be ordered direct from the King's Printer, Ottawa, or through any bookseller in the Dominion.

Labour.—Monthly: The Labour Gazette (published in English and French) at the subscription price of 20 cents per annum. Quarterly: Bulletins of information entitled "Vocational Education." Annually: Report of the Department of Labour (including Report of Proceedings under the Industrial Disputes Investigation Act, 1907; Report of Proceedings under the Employment Offices Co-ordination Act; Report of Proceedings under the Technical Education Act; Report of Proceedings under the Government Annuities Act; Report of Proceedings under the Combines Investigation Act, 1923). Labour Organization in Canada (published each year about May or June). Labour Legislation in Canada as existing December 31, 1920 (a supplementary report thereto on Labour Legislation is published annually in February or March). Two series of bulletins are also issued as follows: Industrial Relations Series—No. 1, Joint Councils in Industry; No. 2, Report of a Conference on Industrial Relations; No. 3, Joint Conference of the Building and Construction Industries in Canada; No. 4, Employees' Magazines in Canada;

No. 5, Canada and the International Labour Conference; No. 6, International Labour Organization; No. 7, Canadian Railway Board of Adjustment, No. 1. Wages and Hours Series—Nos. 1, 2, 3 and 4, entitled Wages and Hours of Labour in Canada, 1901-1920; September, 1920, and June, 1921; September, 1920, and September, 1921; 1921 and 1922, respectively; No. 5, Hours of Labour in Canada and Other Countries; No. 6, Wages and Hours of Labour in Canada, 1921, 1922 and 1923.

Marine and Fisheries.—Marine Annual Report, containing Harbour Commissions, etc. Steamboat Inspection. List of Canadian Shipping. Reports of Expeditions to Hudson Bay, Northern Waters and Arctic Archipelago. Canadian Port Directory. List of Lights, etc., in Canada: (a) Pacific Coast; (b) Atlantic Coast; (c) Inland Waters.

Tidal and Current Survey.—Tide Tables, published annually, for the East Coast, Pacific Coast, and Hudson Bay and Strait; also three abridged editions for St Lawrence region, Bay of Fundy, and Strait of Georgia. Currents in the Gulf of St. Lawrence, the entrance to the St. Lawrence, and the Southeast Coasts of Newfoundland and Belle Isle Strait. Tables of Currents in the Bay of Fundy. Tides at the Head of the Bay of Fundy. Tide levels on the East Coast of Canada and Pacific Coast. Tides and Tidal Streams, a general explanation of the tides.

Radiotelegraph Branch.—Proceedings of the International Radiotelegraph Conference in London, 1912. Chart showing the Radiotelegraph stations in the Dominion of Canada. Postmaster General's Handbook for Radiotelegraph Operators (Instructions re handling of traffic, etc.).

Hydrographic Survey.—International Waterways Commission Report. Sailing Directions: St. Lawrence Pilot above Quebec; St. Lawrence Pilot below Quebec (English and French); Sailing Directions for the Canadian Shores of Lake Ontario; Canadian Shores of Lake Huron and Georgian Bay; Sailing Directions for the Canadian Shores of Lake Superior. Charts: 34 charts of the St. Lawrence river between Pointe-des-Monts and Cornwall; Ottawa river: 2 sections covering lake of Two Mountains; lake Ontario: 11 coast charts with plans of harbours; lake Erie: 2 sheets, plans of harbours and anchorages; lake Huron: 6 coast charts; Georgian bay: 2 charts; north channel of lake Huron: 3 charts; lake Superior: 12 coast charts; lake Winnipeg: 2 charts; Pacific Coast in the vicinity of Prince Rupert and Queen Charlotte islands: 11 charts; Atlantic Coast in the vicinity of Halifax harbour, St. John harbour and Sydney: 7 charts; Hudson bay: 7 charts; International Waterways Commission Boundary charts between St. Regis and Pigeon bay: 29 charts; gulf of St. Lawrence in the vicinity of Port Borden and Bathurst: 2 charts; gulf telegraph chart of the gulf of St. Lawrence, lower St. Lawrence river to Montreal and Maritime Provinces, showing the telegraph and telephone lines and stations, radiotelegraph, storm and marine signal stations, light-houses and fog alarms operated by or for the Government of Canada; the railway lines, submarine cables, tracks of vessels and tables of nautical distances: 1 chart; charts of the St. Lawrence river between cape Magdalen and Cornwall: 40 charts; the Saguenay river, vicinity of Chicoutimi: 1 chart; lake of the Woods: 1 chart; vicinity of Vancouver island and adjacent mainland: 4 charts.

Mines.—The work of the Department of Mines, chiefly scientific and investigatory, is performed by the Department's four principal units, *viz*: the Geological Survey, Mines Branch, Victoria Memorial Museum Branch, and the Explosives Division.

The Geological Survey carries on areal and economic investigations and research work in mineralogy; the Mines Branch carries on field and laboratory investigations for the furtherance of the mining and metallurgical industries, and compiles statistics and information relating to them; the Victoria Memorial Museum Branch carries on scientific investigations in anthropology, archaeology, zoology and botany; and the Explosives Division, in the administration of the Explosives Act, 1914, has supervision of the manufacture, testing, storage and importation of explosives, and the issuing of licenses under the Act.

The Department of Mines publishes an annual administrative report covering the activities of the whole Department, and the branches publish annual reports as well as memoirs and bulletins on special investigations and districts.

The Geological Survey Branch, from 1842 to 1904, published annual volumes. From 1904 to 1910, upwards of 80 reports were issued, all separately. Since then, the publications have consisted of memoirs and bulletins appearing at irregular intervals, an annual summary report and miscellaneous publications, including Geological Guide Books and Handbooks. The subjects dealt with include areal and economic geology of particular districts, mineralogy, palæontology, and related topics. Publications on ornithology, botany, anthropology, as well as all biological papers, are issued by the *Victoria Memorial Museum Branch*.

The Mines Branch, from its beginning in 1908, has published annual summary reports covering the investigations of the Divisions of Mineral Resources, Ore Dressing and Metallurgy, Fuels, Fuel Testing, Ceramic and Road Materials, and Chemistry, and the operations of the Dominion Assay Office. More detailed and comprehensive reports have also been published, dealing with the technology of most of the economic minerals of Canada.

The Explosives Division has published annual reports since 1919.

The publications of the Department of Mines cover the geology and mineral resources of the greater part of Canada. Most of the reports are available free of charge, or for a nominal price, on application to the Deputy Minister of Mines. Some of the reports may be had in French translations.

National Defence.—*Militia and Defence.*—Annual Report; Militia List; Militia Orders; General Orders. *Naval Service.*—Naval Service Annual Report. The Naval Service Department was established by Act of Parliament in 1910. It comprised Naval Service, Fisheries Protection Service, Tidal and Current Survey, Hydrographic Survey and Radiotelegraph Service.

Post Office.—Annual Report of the Postmaster-General. Official Postal Guide. Regulations as to rural mail delivery.

Public Works.—Annual Report.

Board of Railway Commissioners for Canada.—Annual Report. Pamphlet containing Judgments, Orders, Regulations and Rulings, issued fortnightly.

Railways and Canals.—Annual Report of the Department. Publications of the Highways Branch.

The Research Council of Canada.—Annual Reports: Reports of the Research Council for the years 1917-18; 1918-19; 1919-20; 1920-21; 1921-22; and 1922-23. General Reports: (1) The Briquetting of Lignites, by R. A. Ross, E.E., D.Sc.; (2) The Recovery of Vapours from Gases, by Harold S. Davis, M.A., Ph.D. and Mary Davidson Davis, B.A.; (3) The De-tarring of Gas by Electrical Precipitation, by J. G. Davidson, Ph.D.; (4) Nicotine and Tobacco Waste, by A. D. Hone, M.A.; (5) Canadian Waste Sulphite Liquor as a Source of Early Putrefaction of Eviscerated Fish in which the Gills have been left, by L. Gross, M.D.; (7) Survey of General Conditions of Industrial Hygiene in Toronto, by the Associate Committee of the Research Council on Industrial Fatigue; (8) A Method of Smelting Titaniferous Iron Ore, by W. M. Goodwin; (9) Food Requirements of the Ranch Fox, by G. E. Smith, B.A.Sc.; (10) Fuel Saving Possibilities in House Heating, by L. M. Arkley and James Govan; (11) The Red Discoloration of Cured Codfish, by F. C. Harrison, D.Sc., F.R.S.C., and Miss Margaret E. Kennedy, B.A., M.Sc.; (12) The Discoloration, Smut or Blackening of Canned Lobster, by F. C. Harrison, D.Sc., F.R.S.C., and E. G. Hood, Ph.D.; (13) Cultural Criteria for the Distinction of Wood-destroying Fungi, by Miss Clara W. Fritz, B.A., M.Sc.; (14) On the Utilization of the Low Grade Iron Ores of Canada, submitted by the Sub-Committee of the Research Council on Iron Ores, J. G. Morrow, Esq., Chairman. Bulletins: (1) The Need for Industrial Research in Canada, by Frank D. Adams, Sc.D., LL.D., F.R.S.; (2) Researches on Sound Measurements, Louis V. King, M.A., D.Sc., F.R.S.C.; (3) How to Handle Frozen Fish, by E. E. Prince, D.Sc., LL.D.; (4) Hints on Frozen Fish, by E. E. Prince, D.Sc., LL.D.; (5) Science and Industry, by Prof. J. C. Fields, Ph.D., F.R.S.; (6) The Heating of Houses; Coal and Electricity Compared, by A. S. L. Barnes; (7) The Manufacture of Ethyl Alcohol from Wood Waste, by G. H. Tomlinson, B.A.; (8) Some Problems of the Fox Raising Industry, by A. Hunter, M.A., Ch.B., F.R.S.C.; (9) The Honorary

Advisory Council for Scientific and Industrial Research and its Work, by Frank D. Adams, Sc.D., LL.D., F.R.S.; (10) A Plan for the Development of Industrial Research in Canada, by R. F. Ruttan, D.Sc., F.R.S.C.

Secretary of State.—Annual Report. Documents relating to Extradition Procedure. List of Companies Incorporated under the various Companies Acts of the Parliament of Canada from 1867 to December 31, 1913. Copies of Proclamations, Orders in Council and Documents relating to the European War. Method of conducting correspondence between the Dominion and Provincial Governments. The Arms of Canada.

Trade and Commerce.—Annual Report. Annual Report of Board of Grain Commissioners for Canada. Annual Report of Weights and Measures, Electricity and Gas. Final Report of the Fuel Controller (1919). List of Licensed Elevators, etc. Grain Inspection in Canada (1914). Commercial Intelligence Journal (weekly). Russian Trade (1916). The German War and its relations to Canadian Trade (1914). Toy-making in Canada (1916). The Timber Import Trade of Australia (1917). British West Indies, Preferential Tariff of. Canadian Economic Commission to Siberia (1919), Confidential Appendix. Canada-West Indies Conference (1920). Dominion Grain Research Laboratory (1920). Electrical Standards and their application to trade and commerce. Motion pictures, Catalogue of. Report of Special Trade Commission to Great Britain, France and Italy—French and English (1916). Rules and Forms of the Canadian Patent Office. Patent Office Record (weekly). Trade after the War (1916). Trade of the New Countries of South-East Europe (1921). Trade between Canada and the British West Indies Colonies (1920). West Africa and its Opportunities for Canadian Trade (1921). Chinese Markets for Canadian Products (1919). Imports into Canada from the United States (1921). Markets of Jamaica and the Republics of Colombia, Venezuela, and Panama (1922), price 35 cents. Packing for Overseas Markets (1922). The Indian Empire as a Market for Canadian Products (1922). Trade with Egypt (1921). Trade with Greece (1921). Trade with South China (1918). Trading Opportunities in Scandinavia (1922). Trading with Spain (1920). Trading with Switzerland (1922). Republic of Chile, its Economic Condition and Import Opportunities. Representation in British and Foreign Markets. The Market of British Malaya. Republic of Peru, its Development and Commercial Opportunities.

Publications of the Dominion Bureau of Statistics.—For the publications of the Bureau, covering the field of Canadian statistics, see pages 946-951.

IV.—PUBLICATIONS OF PROVINCIAL GOVERNMENTS.

List of Principal Publications of the Provincial Governments of Canada, as compiled from information supplied by the respective Governments.

Note.—The numbers within brackets are the numbers of the bulletins. The publications of the larger provinces are arranged by Departments.

PRINCE EDWARD ISLAND.

Journal of the Legislative Assembly. Statutes. General Index to Statutes of P.E.I., 1869-1918. Royal Gazette. Annual Reports of the Provincial Auditor on Public Accounts and of the Departments of Public Works, Education, Agriculture, Falconwood Hospital (for the Insane) and Vital Statistics.

NOVA SCOTIA.

Royal Gazette. Statutes, Journals and Proceedings of Legislative Council. Journals and Proceedings of the House of Assembly. Journal of Education. Manual of the Public Instruction Acts and Regulations of the Council of Public Instruction, 1921. Annual Reports on Public Accounts, Vital Statistics, Statistics of Incorporated Towns and Municipalities, Public Health, Education, Industries and Immigration, Agriculture, Crown Lands, Mines, Subsidized Railways and other Public Works, Rural Telephones, Humane Institutions, Public Charities, including

report of Hospital and Sanatorium, Penal Institutions, Neglected Children, Temperance, Publicity, Printing, Legislative Library, Utility Board and Workmen's Compensation Board. Also Annual Reports of the Provincial Secretary, the Factory Inspector and of the Highway Board, Power Commission and Game Commissioners.

NEW BRUNSWICK.

Royal Gazette. Statutes. Annual Reports of the Auditor-General, of the Board of Health, of the Departments of Education and Agriculture (including Horticulture). Annual Reports on Public Works, Crown Lands, the Hospital for the Insane, the Factory Report, Report of the Jordan Memorial Tuberculosis Sanatorium at River Glade, Report of Women's Institutes, Report of Chief Inspector under Prohibition Act and Report of the Workmen's Compensation Board. Official Year Book.

QUEBEC.

Note.—The titles of publications available in the English language are printed in English.

Attorney-General.—Annual Report of Prison Inspectors; Annual Report of Public Utilities Commission. Report of the Commission charged with revising and consolidating the General Statutes of the Province of Quebec (1923).

Provincial Secretary.—Annual Report of the Secretary and Registrar; Annual Report of the Superior Board of Health of the Province of Quebec; Statistical Year Book; Education Statistics; Financial Statistics of School Corporations; Municipal Statistics (annual); Judicial Statistics (annual); Statistics of the Penal Establishments (annual); Statistics of the Benevolent Institutions (annual); The Official Gazette (weekly); The Statutes of the Province (annual); Revised Statutes of the Province (1909); List of Municipal Corporations (annual); Rapport de l'Archiviste (annuel); Monuments commémoratifs de la province de Québec, P. G. Roy.

Treasury.—Annual Statement of Public Accounts; Annual Estimates.

Lands and Forests.—Annual Report of the Minister; Surveyed Townships and Explored Territories, 1889; Richesse Forestière de la Province de Québec, J. C. Langelier, 1905; La Forêt, Fernow, 1905; Arbres de Commerce de la Province de Québec, 1906; Table of Families of Twelve Children, Eugène Rouillard, 1904, 1906; Townships Surveyed and Territories Explored, 1908; List of Timber License Holders, 1911; Dictionnaire des Lacs et Rivières de la Province de Québec, Eugène Rouillard, 1914, Bulletin No. 1 of the Forestry Service; Table of Water Powers granted by the Province of Quebec, from 1st July, 1867, to 31st December, 1913, A. Amos; Bulletin No. 2 of the Forestry Service, Piché and Bédard, 1914; No. 1, La Rouille vésiculaire du Pin blanc, G. C. Piché; The Water Powers in the Province of Quebec (Illustrated), 1917; Nomenclature of the Geographical Names in the Province of Quebec, Quebec Geographical Commission; Annual Report of the Quebec Streams Commission; Circulaire No. 3, Les Industries forestières de la Province de Québec, G. C. Piché; Notes on the Forests of Quebec, G. C. Piché; Forêts et chutes d'eau de la Province de Québec, Tableau des forces hydrauliques concédées de 1867 à 1923.

Agriculture.—Annual Reports: Department of Agriculture; Competition for Agricultural Merit; Dairymen's Association; Pomological Society; Society for Protection of Plants. *Journal of Agriculture and Horticulture*, illustrated, monthly. *Bulletins*: (1) Plans de fromageries et beurreries; (2) Le drainage pratique; (7) Le cheval du cultivateur; (8) Culture des céréales; (14) La culture du trèfle; (15) La Culture du blé-d'inde fourrager; (16) Guide de l'arboriculteur; (24) The Great Fallacy of White Bread; (25) Etude sommaire sur les céréales; (29) Choix de la semence; (35) Indicateur des éleveurs de volailles de la province de Québec; (39) Celery Culture; (40) How to plant your Fruit Trees; (43) Bean Culture; (44) Vegetable Culture; (45) Liste des présidents et secrétaires des sociétés agricoles; (48) Manuel de médecine vétérinaire; (49) Home Canning of Fruit Products; (50) Sheep Raising for Profit in Quebec; (53) Le fumier de ferme; (55) L'élevage des volailles dans les villes et les villages; (56) De la culture des racines fourragères; (61) Les engrais chimiques et amendments; (62) Le rucher québécois; (65) Le paratounerre; (66) Comment et pourquoi produire des fraises; (67) Insectes

nuisibles aux animaux de la ferme; (69) Ennemis des jardins et vergers; (70) La rotation expliquée; (71) Le paiement du lait et de la crème; (72) Nos érablières; (73) Instruction aux élèves fermiers; (75) Chaux et calcaire pulvérisé; (77) Manuel de la cuisinière; (78) Les engins à gasoline; (80) Les constructions rurales; (81) Disinfection des semences; (82) Les semences de grande culture, etc. *Circulars*: (3) La poule couveuse et les poussins; (15) La diarrhée chez les poussins; (22) Concours d'étables; (25) Culture du maïs; (27) Calendrier d'arrosage pour les vergers; (28) Wheat growing; (30) De la culture de l'orge; (31) De la culture de l'avoine; (32) De la culture du lin; (33) Pulvérisation pour les vergers-potagers; (35) Culture des pois; (36) Culture des haricots; (38) Calendrier général d'arrosage; (39) Usage du miel à la maison; (43) The building of a manure shed; (44) Root competitions; (45) Fall rye in Quebec; (46) Oats; (47) Wheat growing in Quebec; (48) Grain corn; (49) The smuts of cereals; (50) Plant diseases; (51) Farm underdrainage and why we should do more of it; (52) Sunflowers; (53) Late blight of potatoes; (54) Grain crops and their culture; (55) Sweet clover; (56) Soil management and crop rotations; (57) Planting and caring for the corn crop in Quebec; (58) Root growing; (59) Farm manures; (60) Organizing an agricultural co-operative society; (61) Plant diseases; (62) Sources of seed; (63) Hay and pasture crops; (64) Green manuring; (65) Common weeds and their control; (66) Alfalfa growing in Quebec (notes on the use of lime on the land); (68) Instructions to school gardeners; (69) Le paiement du lait, etc.

Roads.—Annual Report of the Minister of Roads; Loi concernant le département de la voirie.

Colonization, Mines and Fisheries.—Minéralogie pratique à l'usage des Prospecteurs, par J. Obalski (1910); Fur Farming in the Province of Quebec, 1921; Mines and Minerals of the Province of Quebec, by Théo. C. Denis (1914); Iron ores of the Province of Quebec, by P. W. Dulieux (1915); Extracts from reports on the district of Ungava, by T. C. Denis (1915); Report on the Copper Deposits of the Eastern Townships, by J. Austen Bancroft (1916); L'industrie de l'amiant dans la province de Québec (1917); Guide du colon pour la région du Témiscamingue et de l'Abitibi, 1921; Guide du colon pour la région du Nord-Ouest de Montréal et d'Ottawa, 1921; Guide du colon pour la région du Lac Saint-Jean et de Chicoutimi, 1921; Guide du colon pour la région du Sud-Est de Québec, de Témiscouata à Gaspé, 1921; The Eastern Townships of Quebec, 1921; Report on Gold Deposits of lake Demontigny, by Ad. Mailhot, 1922; Annual report on Mining Operations in the Province of Quebec.

Public Works and Labour.—Minister's Report.

Public Instruction.—Code scolaire (1919); School Law (1920); Règlements du comité catholique (1922); Regulations of the Catholic Committee (1922); Regulations of the Protestant Committee (1921); Memoranda of Instructions to Teachers (1923); Annual Report; Financial Statement of the Superintendent of Public Instruction (annual); Mon premier livre (1st and 2nd part) (1900), a fresh edition of which is printed every year; L'Enseignement primaire; Educational Record; yearly circulars containing instructions to school boards and school inspectors.

Legislative Assembly.—Agenda Paper of the Legislative Assembly; Votes and Proceedings of the Legislative Assembly; Journals of the Legislative Assembly; Sessional Papers, Departmental Reports and Returns to Orders and Addresses of the Legislative Assembly; Report of the Clerk of the Crown in Chancery on elections (published after every general election); Report of the Librarian of the Legislature; Annotated Rules and Standing Orders of the Legislative Assembly of Quebec; Private Bills in the Legislative Assembly of Quebec (a manual containing the rules relative to); Government and Legislature; List of the Chairmen and Members of the Committees of the Legislative Assembly.

ONTARIO.

Premier.—Report of the Hydro-Electric and Timiskaming and Northern Ontario Railway Commissions.

Provincial Secretary.—Annual Reports: Registrar-General; Hospitals and Charitable Institutions; Hospitals for the Insane; Prisons and Reformatories; Institutions for the Feeble-minded and Epiletics; Neglected and Dependent

Children. Digest of the Ontario Social Laws. Annual Report of the Secretary and Registrar of the Province of Ontario. Municipal Bulletins. Act respecting the Solemnization of Marriage.

Treasury.—Annual Statements; Main, Supplementary and Further Supplementary Estimates of Expenditure; Public Accounts; Financial Statement of Treasurer delivered in the Legislative Assembly; Auditor's Report; Bureau of Archives Report; Statutes of the Province.

Attorney-General.—Reports of Inspectors; Legal Offices; Registry Offices; Insurance; Division Courts. Annual Report of Board of License Commissioners and of the Commissioner of Provincial Police.

Registrar-General.—Vital Statistics Act. Physicians' Pocket Reference to the International List of Causes of Death. Annual Report of Births, Marriages and Deaths.

Department of Labour.—Report of the Labour Department, including Chief Factory Inspector, Chief Boiler Inspector, Chairman of the Stationary Engineers' Board, General Superintendent of the Ontario Offices of the Employment Service of Canada, and Interprovincial regulations regarding boiler construction and inspection.

Board of Health.—(1) Public Health Act and Vaccination Act. (2) Venereal Disease Act. (3) Vital Statistics Act. (4) Annual Report of Provincial Board of Health (latest). (5) Previous Annual Reports. (6) Regulations *re* Communicable Diseases; Tuberculosis; Summer Resorts; Meat; Drinking Water; Burial and Transportation of dead. (7) Regulations *re* Slaughter Houses, Abattoirs and Manure. (8) Regulations *re* Disinfection, etc. (9) Bulletin No. 9: Rural and Semi-urban Sanitation. (10) Regulations *re* Venereal Diseases. (11) Regulations *re* Sanitary Control of Lumber and Mining Camps. (12) List of Officers of Board: M.O.H's and Secretaries of Local Boards. (13) Laboratory Services. (14) Review of Ten Years' Progress. (15) Insulin. (16) What We Know about Cancer. (17) What Everyone Should Know about Cancer. (18) Information *re* Cancer (Circulars). (19) List of Notifiable Diseases. (20) Diphtheria: (a) Diphtheria; (b) Prevention and Cure of Diphtheria; (c) Analysis of Diphtheria Deaths in Ontario; (d) Facts *re* Diphtheria (Dr. McCullough's speech). (21) Scarlet Fever. (22) Typhoid Fever: (a) Typhoid Fever; (b) Prevention of Typhoid Fever by inoculation. (23) Measles. (24) Smallpox. (25) Tuberculosis: (a) General Facts; (b) Personal Precautions; (c) General Precautions; (d) Forms. (26) Vaccination. (27) Anterior Poliomyelitis. (28) Encephalitis Lethargica. (29) Louissness—Lice. (30) Bedbugs. (31) Mosquitoes. (32) Flies. (33) Lead Poisoning. (A compilation of Present Knowledge). (34) Ontario's Municipal Efforts. (35) Simple Method of Water Purification. (36) Baby Book. (37) Need of Public Health Nurse. (38) Diet Cards: (a) Breast Feeding; (b) Artificial Feeding; (c) Feeding children nine months to two years; (d) Feeding, two years to six years; (e) Feeding children of school age. (39) Squint. (40) Breast Feeding. (41) Health Message. (42) Mouth Hygiene. (43) Health Promotion and Disease Prevention. (44) Health Almanac. (45) Quarantine in Communicable Diseases. (46) Annual Report, Skeleton Form for M.O.H's. (47) Model Milk By-law. (48) Pasteurization of Milk. (50) Stokes' Booklet. (51) V.D. No. 1—General Facts *re* V.D. (52) V.D. No. 2—Facts for Young Men. (53) V.D. No. 5—Facts for Girls and Young Women. (54) Venereal Diseases. (55) Instructions *re* Venereal Diseases. (56) Latrine Posters *re* Venereal Diseases for Men. (57) Prevention of Babies' Sore Eyes. (58) Health Confessions of Business Women. (59) Hazards for Spray Painting Machines. (60) Some Clinical Aspects of Industrial Poisoning. (61) The use of Industrial Morbidity Records in keeping down Absenteeism. (62) Physical Examination in Industry.

Public Works.—Annual Report of the Minister, with reports of the Architect, Engineer, Statements of Secretary and Law Clerk and of Accountant. Report of the Queen Victoria Niagara Falls Park Commission.

Department of Public Highways.—Annual Report; Annual Proceedings, Good Roads Association; (9) Report of the Ontario Highways Commission, 1914; (10) Regulations respecting Township Road Superintendents, 1916; (11) Regulations respecting County Roads, 1920; (14) Township Road Improvement, 1918; (15) Highway Traffic Act, 1924; (16) General Specifications for Concrete High-

way Bridges, 1920; (17) General Specifications for Steel Highway Bridges, 1923; (18) Highway Bridges, 1917; (19) General Plans for Steel Highway Bridges, 1917; (20) Description of Road Models Exhibit, 1917; (21) Short Forms for Bridge Tenders, 1917; (22) Report on Street Improvement, 1917; (25) Country Road Legislation, as enacted by the Highways Improvement Act, the Ontario Highways Act, and the Obstructions on Highways Removal Act, 1920; (28) Main Road Legislation, 1919; (29) Regulations respecting Township Roads, 1920; (30) Township Road Legislation as enacted by the Ontario Highways Act, 1920; (31) Motor Vehicle Headlamps; (32) Report of Committee on Road Accounting; (33) The Provincial Highway Act, 1922; (34) The Planting and Care of Roadside Trees, 1923; (35) Public Vehicles Act, 1923.

Game and Fisheries.—Annual Report. Game Laws. Pheasant Culture.

Mines.—Mining Act; Ontario Mines and Mineral Resources; Bulletin 48, The South Lorrain Silver Area; Bulletin 51, Preliminary Report on Silver Production in 1923; Vol. XXXII, Part VI, 1923, Mines of Ontario, etc.

Lands and Forests.—Annual Report. Handbook of Northern Ontario on Colonization.

Agriculture.—*Annual Reports:* Minister of Agriculture; Agricultural College and Experimental Farm; Agricultural and Experimental Union; Live Stock Branch; Stallion Enrolment Board; Agricultural Statistics; Bee-Keepers' Association; Fruit Growers' Association; Vegetable Growers' Association; Entomological Society; Agricultural Societies; Horticultural Societies; Women's Institutes. *Bulletins:* (187) Codling Moth; (194) Apple Orchardling; (198) Lime Sulphur Wash; (210) Strawberries and Raspberries; (218) Birds of Ontario; (219) San Jose and Oyster Shell Scales; (220) Lightning Rods; (222) Currants and Gooseberries; (224) Greenhouse Construction; (229) Smuts and Rusts; (231) Vegetable Growing; (239) Potatoes; (240) Bacterial Diseases of Vegetables; (241) Peach Growing in Ontario; (242) Diseased Mouths a cause of Ill-Health; (243) Nature Study, or Stories in Agriculture; (244) Hints for Settlers in Northern Ontario; (249) The Pear in Ontario; (250) Insects affecting Fruit Trees; (251) Insects affecting Vegetables; (252) Preservation of Food—Home Canning; (254) War Breads; (257) Diseases of Fruit Trees; (259) Books on Agriculture; (260) Experiments with Farm Crops; (261) Wheat and Rye; (262) Sugar Beets; (265) Bacteria; (266) Cheese-making and Butter-making; (267) Farm Water Supply; (268) Farm Crops; Experiments at O.A.C.; (269) Hay and Pasture Crops, Grasses, Clovers, etc.; (270) Judging Vegetables; (271) The Apple Maggot; (274) Sheep; (276) Bee Diseases; (277) Motor Transportation in Rural Ontario; (279) Community Halls; (281) Better Bulls; (284) Milk Production Costs; (285) Flour and Bread-making; (287) Silos and Silage; (289) The Cabbage Maggot; (290) The Rural Literary and Debating Society; (291) The Production and Marketing of Ontario Cheese; (292) Farm Poultry; (293) Feeding Young Live Stock; (294) Grafting Fruit Trees; (296) Sweet Clover; (297) Colony Houses for Swine; (298) Soil Surveys; (299) The Bacon Hog; (300) The Care of Farm Implements; (301) The Brood Sow; (302) Insecticides and Fungicides; (303) Mushrooms; (304) Contagious Abortions of Cattle; (305) Diseases of Poultry. *Specials* (Without Serial Number): Debates and Plays; Co-operative Marketing; Food for the Family; Better English.

Colonization Branch.—Farming in Ontario; Northern Ontario; Northwestern Ontario.

An average charge of 10c. each (including postage, now required to be paid) for the above bulletins, and 15c. for annual reports, is made to individuals living outside of Ontario.

Education.—Annual Report of the Minister of Education. Archæological Report. School Acts, 75 cents cloth boards, 50 cents paper. Regulations and Courses of Study: Public and Separate Schools; Continuation Schools; High Schools and Collegiate Institutes; School Cadet Corps; General Announcement of Summer Courses; Text Book regulations, including list of those authorized and their prices; Summer Model Schools for Training of Teachers; Autumn Model Schools for Training of Teachers; English-French Model Schools; Syllabus of Regulations and Normal School Courses for First and Second Class and Kinder-

garten Primary Certificates; List of Teaching Days of High, Continuation, Public and Separate Schools; Recommendations and Regulations for Vocational Schools, etc. Recommendations and Regulations for Agriculture and Household Science Departments. Courses in History for Junior High School Entrance Examinations. Junior High School Entrance and Junior Public School Graduation Examination Instructions. Regulations *re* Validity of Teachers' Certificates; Special List of Schools; Announcement *re* The Carter Scholarships; The Penny Bank of the Schools of Ontario; The School Attendance Acts and the Recommendations and Regulations and the Part Time Courses; The Consolidation of Rural Schools; List of Teachers' Manuals and prices; List of Schools and Teachers.

MANITOBA.

Agriculture.—*Booklets:* Manitoba—the Bull's-Eye Province of Canada; Stock Raising in Manitoba; Le Manitoba (French); Periodical Crop and Live Stock Reports; Map of the Province; Calendar of the Manitoba Agricultural College. *Bulletins:* Management of the Brood Mare and Foal; Common Diseases and Disorders of the Foal; Agricultural Society Activities; Farm Butter-making; Practical Cookery; Home Dressmaking; The Cream Separator on the Farm; Annual Pasture and Forage Crops for Manitoba; Lessons in Millinery; Bee Keeping in Manitoba; Common Breeds of Poultry; Hand Selection and Harvesting of the Seed Plot; Laundering and Dyeing; Milk and Cream Testing on the Farm; Clothing for the Family; Financing the Home; Making Clothes last Longer; Fattening, Killing, Dressing and Marketing Chickens; Debating Clubs; Silo Construction; Hay and Pasture Crops in Manitoba; The Farm Flock (Sheep); The Root Crop in Manitoba; Grasses and Clovers for Manitoba; Making Silage in Manitoba; Alfalfa and Sweet Clover Growing in Manitoba; Manitoba Potato Diseases and their Control; Weeds of Manitoba; Cereal Diseases in Manitoba; The Trench Silo; Home Cheese-making; Poultry Houses for Farm and Town; Control of Grasshoppers; Growing Small Fruits in Manitoba. *Circulars:* Summer-fallow Competitions in Manitoba; How to Preserve Eggs; Back-yard Poultry Keeping; Standards for Judging Vegetables; Dugouts for Water Storage; Beautifying Home Surroundings; Protect the Birds; Chart *re* dates of Bird Migration.

Education.—Annual Report. Empire Day Booklet. Consolidation of Schools. Programme of Studies. Education among New Canadians. Municipal School Boards. Report of Commission on Education.

Municipal Commissioner.—Statistical information respecting the Municipalities of the Province, with names and addresses of administrative and health officials of each municipality. Report of Public Utility Commission. Provincial Board of Health. Manitoba Tax Commission.

Public Works.—Annual Report, including reports on Public Institutions. Report of Good Roads Commissioner. Bureau of Labour.

Attorney-General.—Annual Report, included in Sessional Papers. Government Liquor Commission.

Provincial Treasurer.—Public Accounts; Estimates; Budget Speech; Report of Manitoba Government Telephone Commissioners. Report of Mothers' Allowance Commission. Report of Rural Credits Branch.

Provincial Secretary.—Manitoba Gazette. Journals and Sessional Papers. Statutes of the Province. List of Incorporated and Licensed Companies operating in Manitoba.

Provincial Lands.—Report of lands sold, unsold, etc.

SASKATCHEWAN.

Agriculture.—Annual Report of the Department of Agriculture. Annual Reports of Branches, etc.: Dairy, Live Stock, Field Crops, Game, Statistics, Extension Department of College of Agriculture. Commission Reports: Live Stock Marketing, Better Farming, Wheat Marketing. Bulletins and leaflets on Live Stock, Field Crops, Dairying, Farm Buildings, Tillage Methods, etc.

Other Publications.—Annual Reports: Department of the Attorney-General; Bureau of Labour and Industries; Department of Education; Department of Highways; Department of Municipal Affairs; Department of Provincial Secretary; Department of Public Works; Bureau of Public Health; Department of Telephones; Department of Railways; Local Government Board; Public Accounts; Bureau of Child Protection; The Public Service Monthly.

ALBERTA.

Agriculture.—Soil Cultivation; Winter Rye; Potato Growing; Vegetable Gardening; The Storing of Roots; Weeds Poisonous to Live Stock; The Destruction of the Gopher; Live Stock, Sheep in Alberta; Preparing for the Pig Crop; The Use of Pasture in Pig Raising; The Silo in Alberta; Successful Poultry Raising. Household Bulletins: Meat Curing on the Farm; A Talk about the Baby; Home Canning of Fruits, Vegetables and Meats; Home Drying of Fruits and Vegetables; Handbook of Alberta; Control of Grasshoppers in Alberta; The Housing of Swine; Calendar, Provincial Schools of Agriculture; Opportunities in Alberta; Conservation of Soil Fertility and Soil Fibre; Alberta Game Laws.

Education.—Public School Course of Study; Public School Leaving Examinations; Elementary Agriculture and Gardening; High School Course of Studies; Courses in Art and Manual Arts, IX, X, XI; Course in Agriculture, Grade XI; Course in Music for High Schools; Course in Household Economics for High Schools; Summer School Announcement; Course of Studies and Examinations for Commercial Diplomas; Normal School Announcement; Night Class Instruction in Mining Centres; Technical Education in Mining Centres; School Buildings in Rural and Village School Districts; The Certification of Teachers in Alberta; Syllabus of Physical Training for Schools; Third Annual Announcement of the Provincial Institute of Technology and Art; Specifications for Teacher's Residence; Plans and Specifications (School Building Design "B"); Specification "B" (School Building Design); School Ordinance.

Attorney-General.—Annual Report on Dependent and Delinquent Children.

Treasury.—Extracts from Public Accounts, 1920; Budget Speech, Provincial Treasurer, 1921; Financial and General Information Bulletin.

Public Works.—Annual Report of Public Institutions; Annual Report of Public Works Department.

Municipal Affairs.—Annual Report of Department; List of Alberta Municipalities.

Public Health.—Annual Report of Department; Annual Report on Vital Statistics. Bulletins issued monthly on various Health Subjects. Pamphlets regarding Infectious Diseases—Diphtheria, Scarlet Fever, Measles, Whooping Cough, Smallpox, etc. (in different languages).

Annual Reports are also issued by the following departments and branches: Provincial Secretary, Railways and Telephones, Treasury (Insurance Branch), Public Accounts, Board of Public Utilities, Agriculture.

BRITISH COLUMBIA.

Agriculture.—*Bulletins*: Live Stock and Mixed Farming: (60) Hog-raising in British Columbia; (64) Goat-raising in British Columbia; (66) Silos and Silage; (67) Feeding and Management of Dairy Cattle (2nd edition); (71) Butter-making on the Farm (2nd edition); (77) Sheep-raising in British Columbia; (80) Management of Market Rabbits (2nd edition); (86) the Potato in British Columbia (2nd edition); (87) Fertilizers; (90) Yields, Grades, Prices and Returns for Apple Varieties in the Okanagan Valley; (92) Bee Culture in B.C. Poultry-Raising, etc.: (26) Practical Poultry-raising (7th edition); (39) Natural and Artificial Brooding and Incubating (3rd edition); (49) Market Poultry (3rd edition); (63) Poultry-house construction; (74) Breeding and Selection of Commercial Poultry; (93) Feeding for Egg Production. *Poultry Circulars*: (2) Tuberculosis in Poultry (2nd edition); (4) Management of Turkeys (2nd edition); (11) Poultry-Keeping on a

City Lot (3rd edition); (12) Management of Geese; (15) Profitable Ducks; (19) Poultry Rations and their Practical Application (2nd edition); (25) Hatching Hints; (26) Soil-contamination; (27) Breeding Stock Hints; Poultry-Breeders' Directory (No. 12). *Horticultural Circulars*: Spray Calendar (Revised, 1924); (14) Practical Irrigation; (27) Methods of Fruit Picking and Handling; (31) Peach-twigg Borer (3rd edition); (32) Cabbage-root Maggot; (33) Strawberry-root Weevil; (34) Woolly Aphis of the Apple, (2nd edition); (35) Currant Gall-mite (2nd edition); (36) The Onion-thrips (3rd edition); (37) The Imported Cabbage-worm (2nd edition); (38) The Lesser Apple-worm (2nd edition); (39) Apple Aphides (2nd edition); (40) Soap Solutions for Spraying (2nd edition); (41) The Oyster-shell Scale (2nd edition); (42) Top-working of Fruit trees and Propagation; (43) Gardening on a City Lot; (44) Apple-Scab; (45) Anthracnose; (46) Egg-plant and Pepper Growing in British Columbia Dry Belt; (48) Forcing Houses and Frames for producing Early Vegetable Plants; (52) Diseases of Stone fruits (2nd edition); (52) Selection of Orchard Sites and Soils; (54) Loganberry Culture; (55) Raspberry Culture; (56) Currant and Gooseberry Culture (2nd edition); (57) Blackberry Culture; (58) Strawberry Culture; (60) Pruning Fruit trees; (61) Making Lime-Sulphur at Home; (62) Planting Plans and Distances; (63) Locust control; (64) Varieties of Fruit recommended for Planting in B.C.; (65) Tomato growing in B.C.; (66) Fire-blight. *Circular Bulletins*: (1) Thousand-headed Kale (2nd edition); (13) Root-seed Growing in British Columbia; (20) Seed-growers' Directory, 1917-18; (22) Medical Inspection of Schools; (23) Peas and Oats for Silage. *Agricultural Department Circulars*: (14) Community Breeding (2nd edition); (29) Hints to Exhibitors at Fall Fairs; (33) Vancouver island and Gulf islands (2nd edition); (34) Agriculture in West Kootenay; (35) How to Pack Nursery Stock, etc.; (36) Preliminary Report of Forty-five Dairy Farms at Chilliwack, etc.; (38) The Cost of producing Apples in Okanagan Valley; (39) Peat and Muck Soils; (40) The Okanagan Valley; (41) Poultry Farm Survey; (42) The Columbia-Kootenay Valley; (43) Agriculture in the Similkameen, Boundary and Kettle River districts. *Dairy Circulars*: (1) Starters for Farm Cheese-making; (2) Farm Cheese; (3) Cottage Cheese; (4) Clotted Cream; (5) Varying Butter-fat Tests; (6) Care of Milk and Cream; (7) Certified Milk and Butter-fat Records. *Soil and Crop Circulars*: (1) Certified Seed-potatoes—Why they will pay; (2) The Colorado Potato-beetle in B.C.; (3) Kale and Rape Crops; Seed-growers' Directory, Year 1924. *Miscellaneous Bulletins*: (1) Handbook of B.C. (Revised edition); (8) Agriculture in B.C. (2nd edition); (27) Climate of British Columbia (8th edition); (39) Small Fruit Survey; (48) Exhibiting Fruit and Vegetables (2nd edition); (59) Agricultural Statistics, Year 1913; (65) Agricultural Statistics, Year 1914; (68) Diseases and Pests of Cultivated Plants (2nd edition); (76) Agricultural Statistics, Year 1916; (88) Agricultural Statistics, Year 1920; (89) Agricultural Statistics, Year 1921; (94) Agricultural Statistics, Year 1922; (83) Preservation of Food, Home Canning, etc. (2nd edition); (85) Clearing of Bush Lands (2nd edition). *Reports and Miscellaneous*: Agricultural Journal (published monthly, \$1 per annum. Club rates of 50 cents to members of farm and women's organizations); Agricultural Department Annual Reports: Years 1915, 1916, 1917, 1920, 1921 and 1922; Agricultural Fairs Association Report (1918); Board of Horticulture, Rules and Regulations; Farm Account Book; Farmers' Institutes—Booklet on Aims and Objects, Rules and Regulations and By-laws; Leaflet, Order in Council re Bounties; Field Crop Varieties recommended; List of Publications issued by the Department of Agriculture; Opportunities in B.C. (1924 edition); Some Questions and Answers regarding B.C.; Women's Institutes, Rules and Regulations and By-laws.

Lands.—*Bulletins*: (1) How to Pre-empt; (2) Some Questions and Answers regarding British Columbia; (3) British Columbia—North of the Canadian Pacific Railway Belt; (4) Grazing Possibilities of British Columbia; (5) British Columbia—South of the Canadian Pacific Railway Belt; (6) British Columbia Coast (Lower Mainland); (7) British Columbia Coast, Toba Inlet to Queen Charlotte Sound; (8) British Columbia Coast, Queen Charlotte Sound to Milbanke Sound; (9) British Columbia Coast, Milbanke Sound to Portland Canal; (10) Crown Lands, purchase and lease; (11) Cariboo Land Recording Division; (14) Vancouver Island—Alberni and Division; (15) Queen Charlotte Islands—Skeena Land Recording Division; (16) Cranbrook and Fernie Land Recording Divisions; (17) Yale and Division; (18) Osoyoos Land Recording Division;

(19) Nicola Land Recording Division; (20) Nelson and Slocan Land Recording Divisions; (21) Revelstoke and Golden Land Recording Divisions; (23) Stikine and Atlin Land Recording Divisions; (24) Hazelton Land Recording Division; (25) Peace River—East of the Rocky Mountains; (26) Peace River—West of the Rocky Mountains; (27) New Westminster Land Recording Division; (28) Francois-Ootsa Lake; (29) Endako and Nechako Rivers; (30) Stuart and Babine Lakes; (31) Vicinity of the Pacific Great Eastern Railway (Squamish to Clinton); (32) Vicinity of the Pacific Great Eastern Railway (Clinton to 52nd Parallel); (33) Central Lillooet Division; (34) The Chilcotin Plateau; (35) Fort George Land Recording Division, Central and Western portions; (36) Fort George Land Recording Division, Fraser River (south fork) and Cane River; (G) Mount Garibaldi Park; (R) Mount Robson Park; (S) Strathcona Park, Vancouver Island. *Pamphlets*: (44) Kamloops Land Recording Division; (47) Skeena Land Recording Division. *Forest Branch*: (1) Barns, Combination and General Purpose; (2) Barns, Dairy, Ice and Milk Houses; (3) Barns, Beef Cattle; (4) Barns, Horse; (5) Barns, Sheep; (6) Piggeries and Smoke Houses; (7) Poultry Houses; (8) Granaries; (8a) Implement Sheds; (9) Silos and Root Cellars; (10) Farm Houses; (12) How to finish British Columbia Woods; (21) Uses, Strengths, and Working Stresses of B.C. Timber; (T.S) How to obtain a "Timber Sale". *Grazing Branch*: (3) Grazing Management of Crown Lands, Co-operation; (4) Grazing Possibilities of British Columbia; (12) Central British Columbia; Leaflet No. 13, Regulations and Instructions for the use of Crown Ranges for Grazing Live Stock.

Mines.—Comprehensive annual reports, obtainable on application to the Department of Mines.

Miscellaneous Publications.—(23) Handbook of B.C., Provincial Information Bureau, 1924; (9) Game of B.C., Provincial Information Bureau, 1919; Opportunities in British Columbia, Provincial Information Bureau, 1924.

XIV.—THE ANNUAL REGISTER, 1924.

I.—DOMINION LEGISLATION, 1924.

The following is an analysis of the Public Acts of the Third Session of the Fourteenth Parliament of Canada, begun and holden at Ottawa on Feb. 28, 1924, and closed by prorogation on July 19, 1924. During the session, 75 public general Acts and 159 local and private Acts were passed. Of the latter, 9 were railway and bridge companies' Acts, 8 were insurance companies' Acts, 3 were Acts respecting patents, 5 were religious corporations' and 4 other corporations' Acts, and 130 were divorce Acts.

Finance and Taxation.—Three Appropriation Acts were passed during the session, cc. 1, 2, and 75. The total amount appropriated under the main estimates by cc. 1, 2 and 75 (Schedule A) was \$245,231,825, of which one-sixth was appropriated by c. 1, one-sixth by c. 2, and two-thirds by c. 75. In addition, appropriations of \$6,604,810 were made by c. 75 (Schedule B), based on the supplementary estimates, 1924-25.

By c. 34, it was enacted that, by direction of the Minister, facsimiles printed from engraving may be used for the signatures of those officers of the Department of Finance who are authorized to sign debentures, stock, annuities, exchequer bills or exchequer bonds. A loan not exceeding \$300,000,000 to meet maturing loans and obligations of Canada was authorized by c. 56.

As regards taxation, it was provided by c. 10 that the Business Profits War Tax Act of 1916 should not apply to accounting periods ended after Dec. 31, 1920. C. 37 transfers the administration of the Business Profits War Tax and the Income War Tax Acts from the Department of Finance to the Department of Customs and Excise.

By c. 68, the general rate of the sales tax was reduced from 6 to 5 p.c.; educational text-books, ice cream and various articles used in the manufacture of instruments of production were added to the list of exempted articles; further, the rate of sales tax on boots and shoes, biscuits of all kinds and creosoted railway ties was reduced to 2½ p.c.; other provisions deal with the taking out of licenses by manufacturers or producers and by wholesalers or jobbers.

The Income War Tax Act of 1917 was amended by c. 46, which increases to \$500 the exemption allowed for each dependent child; the Act was also amended with respect to inter-company purchases and sales at more or less than fair prices and with regard to the taxing of non-residents, and further with respect to partnerships and to liens for unpaid taxes.

By c. 50, the Insurance Act of 1917 is amended to provide that life insurance policies must provide for payment in Canadian money in Canada; and that only those expenses of the Department of Insurance incurred in the administration of the *Insurance Act* shall be charged upon the premium income of insurance companies. Similar provisions are made by cc. 55 and 71 for assessment upon the income of Dominion loan companies and Dominion trust companies respectively, as such companies also come under the supervision of the Department of Insurance.

Agriculture.—By c. 3, the French version of the Fruit Act of 1923 was amended in respect of grades for fruit in closed packages.

Banking.—By c. 7, the Bank Act of 1923 was amended with respect to the appointment of an inspector-general of banks, his tenure of office and removal, his officials and clerical assistants, the inspector-general to examine and inquire into the affairs of each bank at least once in each calendar year, and to be entitled to receive from the officers of the banks such information as may be deemed necessary for the performance of his duties. The inspector-general and his staff are to be officials of the Department of Finance. By c. 8, provision is made for the change of the name of the "Banque d'Hochelaga" to "Banque Canadienne Nationale."

Civil Servants.—The superannuation of civil servants is provided for by c. 69; part I of the Act deals with persons appointed after the coming into force of the Act, each of whom shall contribute 5 p.c. of his annual salary to the Consolidated Revenue Fund, and may receive, on reaching 65 years of age or in case of earlier disablement, an annuity of as many fiftieths of his average annual salary for the last five years of his service as he has served years, provided that he has served at least 10 years, but no allowance is to be paid for service exceeding 35 years; the widow of a contributor to the fund may receive one-half of what he would have received and allowances of one-tenth of what the deceased contributor would have received may be paid in respect of each of his children up to the age of 18 years, provided that the total allowance to widow and children shall not exceed three-quarters of what the deceased contributor would have received. Retirement is generally compulsory at 70 years of age, but the period of service may be extended in special cases to 75 years. Part II of the Act provides that civil servants now coming under the Retirement Act may transfer their accumulated contributions to the retirement fund and receive the benefit of the Superannuation Act; while parts III, IV and V make regulations respectively for the transfer of civil servants coming under the former Superannuation Act, for those not coming under either of the aforesaid Acts, and for certain temporary employees.

Commerce.—By c. 5, the French version of the Patent Act of 1923 is amended. By c. 9, the Belgian Convention Act, 1924, products of the Economic Union of Belgium and Luxembourg and the colonies or possessions or mandated territories of Belgium are granted admission to Canada on the most favourable terms accorded to any foreign power; the Convention also provides that Canadian exports to the Economic Union of Belgium and Luxembourg shall receive most-favoured-nation treatment. The Feeding Stuffs Act of 1923 is amended by c. 42 to provide that certain feeding stuffs may contain 50 p.c. by weight of bran, shorts, middlings or feed flour. By c. 49, the Inland Water Freight Rates Act of 1923 is amended in respect of the definition of "shipper," the filing of charter parties and bills of lading and penalties.

Companies.—The Companies Act is amended by c. 33 in respect of the conditions of the creation of private companies, the issue of shares without nominal or par value, changes of name, the surrender of company charters, incidental and ancillary powers of companies, the payment of commissions for selling shares, the conditions on which a private company may become a public company, and the conditions on which a company may purchase stock in other companies, the transmission of shares by will or intestacy, borrowing powers, qualifications of directors, etc.

Customs Tariff.—C. 36 limits allowance for damages to brittle goods imported by railway or vehicle to cases where the damage exceeds 15 p.c. of the value. C. 38 amends the Customs Tariff of 1907, particularly in reducing the rates of duty levied

upon instruments of production used in agriculture, forestry and mining, and on materials imported for use in the manufacture of such instruments of production.

Elections.—C. 63, the Representation Act, 1924, making the decennial redistribution of the representation in the House of Commons, based upon the results of the census of 1921, is summarized on pp. 73-74 of this volume.

Fisheries.—The Northern Pacific Halibut Fishery Protection Act of 1923 was amended by c. 4 in respect of the seizure of Canadian or United States vessels fishing in prohibited waters during the close season, the forfeiture of the former and the delivery of the latter to authorized officials of the United States. By c. 43, the license fee for salmon canneries is reduced, and c. 44 provides for licenses for manufacturers of fish meal, fertilizer, oil, glue, etc., from fish or fish products.

Immigration.—By c. 45 it was provided, in amendment to the Immigration Act of 1919, that time spent in penal institutions or insane asylums should not be included in the period necessary for an immigrant to acquire Canadian domicile; further, amendments were made in regard to members of a family accompanying a rejected person, to appeals from a board of inquiry, to free transportation for immigration officers, to cost of medical treatment and necessary attendants, and to cost of maintenance, pending return, of rejected immigrants.

Indians.—The Indian Act is amended by c. 47 to provide that the Superintendent-General of Indian Affairs shall also have charge of Eskimo affairs; the Act is also amended with regard to the administration of the estates of Indians, the expenditure of their capital and the borrowing of money for productive purposes. C. 48 brings into effect an agreement between the Dominion Government and the Government of Ontario respecting Indian reserves in that province.

Justice.—By c. 6, the Penitentiaries Act is amended in respect of the power of officers of penitentiaries to prevent escapes and effect re-captures of convicts; it also provides that convicts are not to be conveyed to penitentiaries pending appeals, and that delays due to such appeals are not to be regarded as time served on sentences. By c. 35, automatic machines, vending merchandise on a basis where the return to the operator is a matter of chance, are deemed to be contrivances for playing games of chance under the Criminal Code. The Exchequer Court Act is amended by c. 40 in respect of jurisdiction conferred by agreements to which the Crown is a party. C. 51 provides for the increase of the salary of the judge of the territorial court of the Yukon Territory and c. 52 for the residence of judges of the county or district courts of Ontario within the county court district established under the laws of the province. C. 53 defines "juvenile delinquent," and provides for the release of such on probation, for the support of such children, and for dealing with adults who contribute to the delinquency of children. By c. 62, the Prisons and Reformatories Act is amended to provide for applying certain sections to the interprovincial home for women at Moncton, N.B., on the same basis as to the home for girls at Truro, N.S.

Lands.—By c. 39, the Dominion Lands Act is amended to provide that school lands may be sold at their market value when required for reservoir, church, cemetery or hospital sites. C. 54 repeals the provision of the Land Titles Act requiring registrars and deputy registrars to be barristers, solicitors or advocates in one of the provinces of Canada.

National Defence.—C. 57 amends the Militia Act in respect of the calling-out of the active militia to suppress riots, on the call of the Attorney-General of the province affected, that province to undertake to meet the cost incurred and

the active militia not to be used unless the permanent force is insufficient or not available.

Post Office.—By c. 61, the Postmaster-General is empowered to make regulations *re* registration of letters and compensation for loss.

Public Works.—By c. 58, the Montreal Harbour Commissioners are empowered to build a bridge from Montreal to the south side of the St. Lawrence, to expropriate property, to borrow the money required and to charge tolls for the use thereof. C. 59 authorizes the Minister of Public Works to extend for one year the agreement of 1920 with the city of Ottawa. C. 72 provides for advances, not to exceed \$5,000,000, to the Vancouver Harbour Commissioners for the construction of terminal facilities for the port.

Railways.—By c. 13, it is enacted that where Parliament has authorized expenditures on equipment to the extent of 25 p.c. of the cost thereof, the Canadian National Railway Co. may raise the remaining 75 p.c. by equipment issues. Cc. 14 to 32 authorize the construction of nineteen branch lines of the Canadian National Railways. By c. 70, provision is made for the construction of a viaduct and works in Toronto by the Toronto Terminals Railway Co.

Returned Soldiers.—By c. 60, the Pension Act is amended with regard to the time within which application must be made, the suspension of pension on imprisonment or its payment to a dependant, the payment of compassionate pensions or allowances in especially meritorious cases, the payment of allowances for maintenance of parents; the right of appeal is left open for two years after the appointment of the Federal Appeal Board or for one year after the decision complained of; bonus payments are continued during the years commencing Sept. 1, 1924 and 1925. C. 67 amends the Department of Soldiers' Civil Re-establishment Act in respect of the selection and employment of staff and the receipt and retention of moneys payable to the persons cared for under the Act, and the guardianship of the insane.

Shipping.—By c. 11, it is enacted, as an amendment to the Canada Shipping Act, that foreign vessels captured during the war or ceded as reparations shall be deemed British and entitled to engage in the coasting trade. C. 12 amends the Canada Shipping Act in accordance with draft conventions adopted by the International Labour Conference of the League of Nations, particularly in regard to the employment of children and young persons, the medical examinations of young persons and the payment of seamen's wages.

Scientific Research.—C. 64, the Research Council Act of 1924, provides for an "Honorary Advisory Council for Scientific and Industrial Research," appointed by the Governor in Council on the recommendation of the Committee of the Privy Council on Scientific and Industrial Research. The Council is to have a president, and is to consist of not more than 15 members, holding office, with the exception of the president, for 3 years, but being eligible for re-appointment. The president, who receives such salary and is employed for such term as the Governor in Council prescribes, shall supervise the work of the council and of its technical officers. The council is to meet at least four times a year, members receiving no salary, but their travelling and other expenses. The council is to promote the utilization of the natural resources of Canada, to have supervision of researches undertaken under its auspices, to appoint its technical officers, and to publish scientific and technical information. Discoveries and inventions made by its officers are to be public property, but bonuses or royalties may be paid by the council to the officers making such discoveries or inventions.

Miscellaneous.—C. 66 empowers the Governor in Council to determine the pay and allowance to be received by members of the Royal Canadian Mounted Police, and also deals with their pension rights.

II.—PROVINCIAL LEGISLATION, 1923.¹

Prince Edward Island.

(Acts of the 4th session of the 39th Legislature, begun Mar. 20, 1923.)

Administration of Justice.—C. 5 provides for the appointment of magistrates for the several counties of Prince Edward Island by the Lieutenant-Governor in Council. Their jurisdiction extends only to the county for which they are appointed.

Finance.—C. 6 appropriates certain moneys for the public service for the fiscal year ending Dec. 31, 1923, and the first part of the year ending Dec. 31, 1924. An expenditure of \$697,930 is provided for in schedule "A," while schedule "B" provides, in addition, for the expenditure of \$150,000 on highway improvement under the Canada Highways Act.

Highways.—C. 3 makes provision for exclusive government control over certain roads and streets which may be chosen as parts of the system of provincial roads to be designated under the Canada Highways Act. Such control extends to streets in incorporated municipalities. C. 2 amends the Road Act, 1920, giving authority to inspectors to open temporary winter roads, when necessary, during the winter season from Dec. 15 to Mar. 31 in any year.

Labour, Health and Social Legislation.—C. 1, the Prohibition Amendment Act, prohibits all traffic in liquor within the province, except that through official vendors. Strict regulations regarding the possession of any liquor and containers are stipulated.

Nova Scotia.

(Acts of the 3rd Session of the 37th Legislature, begun Feb. 22, 1923.)

Administration of Justice.—C. 2 provides for the conditional liberation of prisoners in gaols or other prisons on the granting of licenses by the Lieutenant-Governor. Convictions and sentences remain in force during the term of the license, which may be revoked by the Lieutenant-Governor at any time. C. 27 defines the jurisdiction of municipal courts in civil actions, amends the rules of civil procedure in Justices' courts, and amends also the counsel fees payable under the Municipal Courts Act and the Halifax city charter.

Agriculture.—C. 8 provides that the Live Stock and Live Stock Products Act, passed by the Dominion Parliament in 1917, shall have the force of law in the province.

Companies.—C. 6 incorporates the Provincial Exhibition Association, with the public officials who shall be included in its membership, its constitution, rights and powers, and purposes. The Trust Companies Act is amended by c. 64, chiefly with regard to ownership and sale of land, notice *re* withdrawals of deposits, financial statements and their correction before transmission to the Minister, appraisement of real estate holdings, validity of investments and penalties for infringements of

¹Only the more important Public Acts are included.

the Act. The Loan Companies Act is also amended by c. 66, regarding investment of funds, security for loans, authorization of investments by the Minister, amount of money held on deposit and its approval by a general meeting of the company, withdrawal of deposits, statements, validity of investments and penalties for infringements.

Education.—The Education Act is amended by c. 52 with respect to rural high school departments, the municipal school fund, the establishment of free public libraries in school sections and their maintenance, the granting of employment certificates to pupils who must go to work, the powers and duties of school attendance officers and the setting of boundaries of school sections.

Finance.—C. 67 provides for the expenditure of various sums of money for the purpose of defraying the expenses of the public service for the year ending Sept. 30, 1923.

Mining.—The Coal Mines Regulation Act is amended by c. 54, which prohibits the employment of juveniles in or about mines, stipulates the safety of travelling roads and working places and of mechanical hoisting or lowering appliances.

Miscellaneous.—C. 4 establishes the Legislature Internal Economy Board, with power to organize and control all employees of the Legislative Council or House of Assembly other than the chief and assistant clerks and the sergeant-at-arms. C. 5 places the administration of the Public Service Superannuation Act in the hands of the Provincial Treasurer and provides for the payment of superannuation allowances to certain members of the public service of the province under specified conditions, and also for the payment of allowances to widows and children of deceased employees, with further regulations regarding the superannuation fund and its administration. C. 21 amends the Medical Act regarding candidates for preliminary examinations; c. 22 amends the Dental Act regarding registration and licensing of dentists; c. 29 amends the Barristers and Solicitors Act with respect to registration, qualification for enrolment and further particulars regarding articulated clerks in the province; c. 45 provides for the payment of accounts or claims due to the Victoria General Hospital by patients or their representatives when such accounts have been paid by any municipality, and c. 57 sets out qualifications for registration in the Association of Professional Engineers.

Motor Vehicles.—C. 1, an Act to Regulate Motor Carriers, deals with the powers of the Board of Commissioners of Public Utilities over motor vehicles and carriers, together with provisions regarding the licensing and operation of motor vehicles, the application of taxes collected from licenses, the reporting of accidents and penalties for infringements. C. 9 provides for the display of certain plates on all motor vehicles, and for traffic rules for all vehicles.

Municipalities.—The Village Supply Act, 1923, "enables the inhabitants of villages to provide themselves with certain facilities" by providing for the appointment and election of commissioners in any village municipality, their terms of office, meetings of ratepayers, powers of commissioners, by-laws and ordinances, finances, taxation and police protection.

Public Utilities.—C. 7 deals with inside electrical installations, and the duties of consumers and public utility corporations in connection therewith; c. 36 has regard to the earnings of public utility companies; while c. 55 makes slight amendments to the Act respecting the development of electrical energy from water power and other sources.

New Brunswick.

(Acts of the 3rd Session of the 8th Legislative Assembly—April, 1923.)

Administration of Justice.—C. 12 amends the Judicature Act with respect to dates and places of sittings of the chancery division and of certain circuit courts, and regarding examinations for discovery. C. 31 exempts certain goods and effects of a judgment debtor from levy or sale under execution. C. 33 sets out new provisions respecting the establishment and maintenance of a boys' industrial home, principally with regard to sentences, ages of boys committed, warrants, powers of sheriff, finances of the home and liability of municipalities for maintenance of inmates.

Agriculture.—C. 38 sets out additions to the Dairy Industry Act with regard to milk and cream sold to butter and cheese factories, testing and inspection. C. 39 legalizes the provisions of the Live Stock and Live Stock Products Act in the province.

Education.—C. 27 revises and consolidates the Act respecting Vocational Education, regarding boards and committees, funds, teachers and non-resident pupils; c. 28 provides for kindergartens in school districts for all children four to six years of age; c. 29 provides for government aid to schools and teachers to stimulate interest in school gardening, etc.; c. 32 authorizes the grant of \$50,000 to the University of New Brunswick for the erection of a memorial hall.

Finance.—C. 1 provides for the expending of certain itemized sums of money to defray expenses of the civil government up to Oct. 31, 1923.

Game.—The Game Act, 1921, is amended by c. 43 with regard to licenses, powers and duties of licensees, reports of game killed, fur dealers and wildcat bounties.

Highways.—C. 2 appropriates certain moneys for the repair and improvement of roads and bridges and other public works and services, and provides regulations for the disposal of such sums. By c. 17, the Lieutenant-Governor in Council is authorized to borrow \$500,000, to be expended on bridges throughout the province.

Mining.—C. 42 provides for an appeal to the Lieutenant-Governor in Council by persons aggrieved by decisions of the Minister respecting licenses.

Miscellaneous.—C. 7 deals with liens on goods and chattels, their existence, and rights to liens; c. 9, the Warehousemen's Lien Act, contains general provisions with regard to such liens, and to notices, sales, and proceeds of sales. The Quieting of Titles Act, c. 16, deals in detail with titles, certificates of title, judicial investigations, fraud and appeals. C. 19, the Sale of Securities Act, has regard to the scope of the Act, prohibition of the sale of shares, permission to sell, licenses, annual returns by companies, brokers, penalties and fees.

Motor Vehicles.—The Motor Vehicle Law is amended by c. 26 regarding registration fees, lights on motor vehicles, dealers in second-hand cars, dealers' fees and markers.

Labour, Health and Social Legislation.—C. 3 amends and consolidates the Acts relating to the provincial hospital, and provides for the administration of the provincial hospital and the admission and maintenance of patients; c. 4 authorizes the expenditure of \$30,000 for the purchase of land needed by the hospital; c. 5, the Public Hospitals Act, provides for the care of patients who are not resident in the municipality in which the hospital is situated, and the collection of fees for such services. C. 14 incorporates the New Brunswick Pharmaceutical Society and consolidates the laws regarding the practice of pharmacy. C. 18 provides for the

establishment of an interprovincial home for young women; c. 23 amends the Coroners Act; c. 24 amends the Public Health Act; c. 25 provides for the licensing, examination, etc., of moving picture machines and films; while c. 36 regulates the licensing and control of circuses and travelling shows in the province.

Public Utilities.—The New Brunswick Electric Power Act is amended by c. 15 with regard to hydro-electric districts and the supply of power to other corporations and persons.

Railways.—C. 6 extends the time within which the St. John and Quebec Railway may be built to Andover to Dec. 31, 1925.

Quebec.

The 4th Session of the 15th Legislature of the province of Quebec closed on December 29, 1922, and the legislation enacted in that session was reviewed in the 1922-23 edition of the Year Book. The 1st session of the 16th legislature opened on December 17, 1923, and closed on March 15, 1924. As the legislation of this session was practically all sanctioned in 1924, it will be reviewed, together with other 1924 provincial legislation, in the next edition of the Year Book.

Ontario.

(Acts of the 4th session of the 15th Legislature, begun Jan. 23, 1923.)

Administration of Justice.—The Judicature Act is amended by c. 21 with regard to the constitution and judges of the Appellate and High Court Divisions of the Supreme Court of Ontario.

Agriculture.—C. 15 amends the Agricultural Development Act, setting the maximum of loans at \$12,000 and maximum valuation of farms of less than 50 acres at \$300 per acre. C. 16, the Consolidated Cheese Factories Act, authorizes loans for building purposes to consolidated cheese factories on security of first mortgages, with provisions regarding applications and approval.

Assessment.—The Assessment Amendment Act provides for particular assessment of retail business premises occupied and used as such by manufacturers; it also provides for the taking of assessments in cities, towns and villages in periods other than those stipulated in the Act.

Companies.—The Ontario Companies Act is amended by c. 37, which requires that reports of meetings shall be furnished to shareholders on application; maximum penalty for failure to do so is fixed at \$100.

Education.—C. 55 withdraws the application of the Adolescent School Act from rural districts; c. 56, the Banting and Best Medical Research Act, provides for the payment of \$10,000 annually to the University of Toronto for the establishment of a fund to aid in medical research; and c. 105 incorporates the "University of Western Ontario," enlarges the functions of the Board of Governors and changes the composition and enlarges the functions of the senate of the university.

Elections.—The Election Laws Amendment Act, c. 3, contains numerous new provisions regarding the preparation, revision and use of voters' lists, polling places, the composition of election boards and the union of polling places or their separation when villages are situated on the boundary between two electoral districts. C. 44 enables railway employees and commercial travellers to vote at municipal elections before polling day.

Finance.—By c. 1, sums of \$22,058,360 and \$52,546,778 are authorized to be paid from the Consolidated Revenue Fund to defray expenses of the public service for the fiscal years ended 1923 and 1924 respectively. The Ontario Loan Act, 1923, c. 2, provides for the raising of \$35,000,000 for several purposes mentioned therein. By c. 8, authority is given to the Lieutenant-Governor in Council to borrow \$5,000,000, to be used in the development of northern and north-western Ontario.

Forestry.—The Reforestation Act, c. 10, provides for the purchase, expropriation or lease of any lands in the province deemed necessary for reforestation purposes, the Minister, in so doing, having the powers provided by the Ontario Public Works Act (R.S.O., c. 35).

Highways.—C. 48, the Highway Traffic Act, consolidates regulations regarding the registration and licensing of motor vehicles, equipment of all vehicular traffic on streets and highways, chauffeurs' licenses, garage licenses, speed limits, weights and loads, rules of the road, accidents and penalties for contravention. In c. 49, provisions are made to govern the operation of public vehicles (motor busses, etc., operating over regular routes) with respect to licenses and license plates, tolls, speed, equipment and loads, with penalties for non-compliance.

Labour, Health and Social Legislation.—C. 5 prohibits the publishing of betting information in the province. C. 31 amends the Workmen's Compensation Act with regard to compensation paid in certain cases; c. 32 makes slight amendments to the Deserted Wives' and Children's Maintenance Act; and c. 33 amends the Infants Act regarding the custody of infants. C. 35 amends the Ontario Medical Act with regard to the persons to whom it is deemed to apply, and to the records maintained by the Provincial Secretary of all persons filing statements as osteopaths, chiropractors, etc. The Public Health Act is amended by c. 52, which provides for supervision by the Provincial Board of Health of all sources of public water supply, of inquiries and reports as to pollution and of permits to manufacture mineral, distilled and spring water, etc.

Mining.—C. 11, respecting mineral rights in certain Canada Company's lands, authorizes the Crown to deal with all estates, rights, titles, etc., of lands granted to it under the Canada Company's Lands Act.

Miscellaneous.—C. 20 establishes the Bureau of Archives, in charge of the Provincial Archivist, for the collection and preservation of historical documents; c. 26 makes slight amendments to the Registry Act; c. 29 sets out regulations regarding the validity of assignments of book debts; c. 30 enacts provisions respecting liens of mechanics, wage-earners and others; c. 38 deals in detail with the sale of securities and similar transactions; c. 50 sets out provisions for the maintenance of properly kept registers in all standard hotels, with penalties for misrepresentation and false registration.

Municipalities.—C. 7 provides for the payment of \$197,673 to the town of Haileybury during the years from 1922 to 1939, with provisions regarding its procuring money by means of taxes or debenture issues. Further payments to municipalities and school districts on account of uncollectable taxes are also provided for. C. 41, the Municipal Amendment Act, contains amendments regarding council meetings, retiring allowances to servants of corporations, aid to hospitals and exemptions from taxation.

Manitoba.

(Acts of the 1st session of the 17th Legislature—Jan. 18, 1923–May 5, 1923.)

Administration of Justice.—C. 20 provides for sittings of the Court of King's Bench at appointed times, and provides for instructions to be given to juries by the presiding judge. C. 26 amends the Manitoba Magistrates Act respecting returns of convictions, fines and qualifications of J.P.'s.

Agriculture.—C. 24 enables the Department of Agriculture to administer the Live Stock and Live Stock Products Act (Dominion) within the province. Cc. 41 and 42 provide for the issue of notes or debentures by municipalities, to be guaranteed by the government, in order that money may be loaned to farmers for the purchase of seed grain.

Assessment.—The Assessment Act is amended by c. 62, as regards the taxing of houses on exempted property, residence as shown on assessment rolls, mode of payment of taxes in rural municipalities, redemption of lands sold for taxes and validation of assessments; it is further amended by c. 63, respecting fees for applications or assignments and by c. 64 regarding assessments where a leasehold interest in any land is taxable.

Companies.—C. 4 amends the Companies Act regarding the issue of letters patent in respect of capital stock and commencement of business, and also regarding the cancellation of letters patent and their revival. C. 12 provides for the inspection by the Attorney-General of the province of the affairs of companies carrying on financial business.

Education.—C. 34 amends the Public Schools Act regarding non-resident pupils, tenure of office of school boards and trustees, assessments, duties of trustees and of boards, and agreements with teachers.

Finance.—The Manitoba Farm Loans Act is amended by c. 11, particularly respecting the powers of the Board, its liability with respect to loans, advances for the purchase of seed grain and sales of land held by the board. C. 40 makes minor amendments to the Rural Credits Act. By c. 45, the Lieutenant-Governor is authorized to raise by loan and to expend the sum of \$2,700,000 for capital purposes; c. 46 authorizes a further loan of \$2,000,000 under the Provincial Loans Act; c. 47 authorizes the expenditure of \$11,207,085 to defray the expenses of the public service for the fiscal year ended August 31, 1923; c. 48 authorizes a further similar expenditure of \$264,800.

Game.—C. 13 amends the Game Protection Act, setting out new schedules of licenses, dates of seasons and areas of preserves.

Lands.—C. 6 amends the Act respecting Contracts relating to Land, withdrawing the benefits of the Act from certain dates. C. 9 provides for the raising of loans under the Land Drainage Act. C. 33 amends the Provincial Lands Act regarding adjustments with municipalities under various Acts affecting assessment and levies.

Legislation.—Cc. 38 and 39 set out provisions for referring the question of the sale of liquors to the electors of the province.

Motor Vehicles.—C. 32 amends the Motor Vehicle Act regarding schedules of fees for licenses, the registration of dealers' cars and penalties imposed under the Act.

Municipalities.—The Town Planning Act is amended by c. 50, chiefly regarding increase in property values. The Municipal Act is amended by c. 57, principally with respect to sinking funds of municipalities, and to public highways

and thoroughfares. C. 58 further amends the Municipal Act regarding the closing of highways to vehicles, c. 59 respecting licenses to transient traders, c. 60 in respect to housing schemes under the Act respecting Housing, and c. 61 in respect to aid to hospitals. C. 68 defines the name "elector" under the Act respecting **Agricultural and Community districts.**

Public Utilities.—C. 35 transfers the duties of the Public Utilities Commission to the Department of the Provincial Secretary, and amends the Public Utilities Act accordingly.

Social Legislation.—C. 10 prohibits the maintenance of employment agencies in the province; c. 25 legalizes the conveyance of passengers on excursions within the province on Sundays; c. 27 amends the Marriage Act, transferring authority under the Act to the municipal commissioner, and setting out a new schedule of fees; c. 28 amends the Master and Servants Act regarding the filing of certificates of judgment and the return of distress warrants; c. 31 amends the Medical Act with respect to the composition of the council, fees and expenditures; c. 51 amends the Vital Statistics Act regarding fees for searches and registrations; c. 52 extends the protection of the War Relief Act, 1918; c. 53 re-enacts the law respecting Warehousemen's Liens; c. 54 amends the Welfare Supervision Act regarding the name of the Board, appointments, term of office and duties.

Taxation.—C. 1 amends and consolidates the law concerning the taxation of public amusements with regard to licenses, special taxes, moving picture operators, general taxes, collection of taxes, offences and duties of municipalities. C. 14 imposes a tax of one cent per gallon on all gasoline of a specified grade sold in the province. C. 16 provides for the licensing of grain dealers, and c. 17 for the collection of a tax from persons selling grain for future delivery. C. 19 provides for the collection of an income tax by the provincial government, while c. 43 amends the Succession Duties Act with regard to rates of duty and the valuation of estates.

Saskatchewan.

(Acts of the 3rd session of the 5th Legislature, begun Feb. 8, and closed by prorogation on Mar. 22, 1923.)

Administration of Justice.—C. 16 amends the King's Bench Act regarding the appointment of representatives in proceedings; c. 17 amends the District Courts Act with respect to jurisdiction and service, by registered mail, of writs of summons, etc.; c. 18 amends the Surrogate Courts Act regarding sittings, grants of administration to attorney and salaries of judges; c. 20 protects public officers from actions or proceedings against them for acts done in pursuance of any statute, unless within twelve months of the Act or such further time as may be especially allowed. C. 62, the Industrial School Act, 1923, provides for the establishment of a boys' industrial school, for custody and detention, with a view to the education, industrial training and moral reclamation of such boys as shall be lawfully committed for detention therein, with regulations *re* the official commitment, discharge, preservation of order, protection of inmates, escapes and general working of the Act.

Agriculture.—The Agricultural Co-operative Associations Act is amended by c. 43 with respect to registration, changes of names, and returns in cases of companies being wound up. C. 48 extends the provisions of the Live Stock and Live Stock Products Act (Dominion) to the province, and gives the Lieutenant-Governor power to put into force in the province regulations subsequently enacted.

Assessment.—C. 33 amends the Saskatchewan Assessment Commission Act regarding appeals and alterations to equalized assessments.

Companies.—The Companies Act is amended by c. 26, which provides for registration, under penalty of fine, and maintenance of proper lists of companies by the registrar.

Education.—The School Act is amended by c. 39, chiefly with regard to school finances, fees and admission of pupils resident in other school districts. The School Attendance Act is amended by c. 40 regarding the appointment and duties of attendance officers and their co-operation with school officials. C. 42 amends the School Grants Act, reducing grants to schools in operation for less than 200 days in one year, and setting maximum reductions per day at 50 cents.

Finance.—The Appropriation Act, c. 1, provides for the expenditure from the consolidated fund of \$1,295,458 to defray expenses of the public service from May 1, 1922, to April 30, 1923; of \$15,625,718 for the period May 1, 1923, to April 30, 1924; and for the payment out of the telephone revenue of \$2,200,000 for the period from May 1, 1923, to April 30, 1924. C. 10 amends the Saskatchewan Loans Act with regard to the regulation of provincial bond and debenture issues; c. 11 authorizes the provincial treasurer to raise by way of a loan such sums as are necessary for payment of obligations under various Acts of the province; and c. 12 provides for the levying of special rates by municipalities under provisions of the Saskatchewan Assessment Commission Act.

Game.—C. 46 permits the shooting of ducks found damaging crops between August 15 and September 14 of any year, the ducks, however, not to be sold and not to be shot outside of any crop area so suffering damage. Further minor amendments regarding muskrats and other game are added.

Highways.—C. 8 classifies public highways in the province as provincial highways, main market roads, colonization roads and local roads, for purposes of administration of the Highways Act.

Insurance.—The Saskatchewan Insurance Act is amended by c. 27. Detailed provisions regarding automobile insurance are added to the Act, while further additions are made with respect to the sale of accident and sickness insurance policies.

Lands.—C. 47 permits the Lieutenant-Governor to authorize the Minister to acquire by lease certain grazing lands from the Dominion Government, to establish community grazing areas, to lease lands to agricultural co-operative associations and to permit owners of cattle to pasture their animals upon such lands under suitable conditions. The Drainage Act is amended by c. 55 with regard to the issue of interim debentures and the assessment of lands purchased under the Reclamation Act.

Labour, Health and Social Legislation.—C. 9 establishes the Department of Public Health and outlines its scope and duties; c. 53 provides for the maintenance of parents by their children, with provisions for liability of children and non-payment of allowances; c. 54 amends the Act respecting the Administrator of Estates of the Mentally Incompetent, as regards sales of property, etc., bills of exchange and the rights of administrators when incompetents are beneficiaries under wills of deceased persons; c. 58 further amends the Public Health Act; c. 59 incorporates the Saskatchewan Anti-Tuberculosis League and outlines its powers and activities; c. 60 deals with penalties to be imposed for non-compliance with the Factories Act; and c. 61 imposes certain responsibilities on relatives or others with respect to mentally incompetent persons.

Miscellaneous.—C. 21 abolishes priority among execution creditors and deals with the distribution of moneys levied, interpleader proceedings, claims for wages, exemptions, certificates of proof of claims, contestation of claims, trials of contested claims, etc. C. 24 amends the Land Titles Act, including new matter regarding the transmission of interests under the Bankruptcy Act. The Local Improvements Act is amended by c. 32, principally with regard to the payment of hospital expenses of indigents by the Minister of Municipal Affairs.

Municipalities.—C. 4, amending the Municipalities Relief Act, provides for the borrowing of money by municipalities for the support of farmers who have suffered through crop failures. Numerous minor amendments are made to the City Act, the Town Act, the Village Act and the Rural Municipality Act in cc. 28, 29, 30 and 31, all four Acts dealing in part with the testing of dairy cattle for tuberculosis.

Professions.—Cc. 49, 50 and 51 amend the Legal Profession Act, the Saskatchewan Land Surveyors Act and the Act respecting Chemists and Druggists, chiefly with regard to admission of applicants to recognized membership in these professions.

Taxation.—C. 13 consolidates the law relating to succession duty in the province; c. 14 provides for the taxation of persons holding or operating timber berths on a basis of the acreage so held; and c. 36 amends the Arrears of Taxes Act as regards certain persons prohibited from purchasing lands at tax sales and the amount of taxes recoverable from owners.

Alberta.

(Acts of the 3rd session of the 5th Legislative Assembly, begun Jan. 23, 1923.)

Agriculture.—C. 9 enlarges the functions of the Department of Agriculture in its activities as an agent for sale. C. 10 amends the Domestic Animals Act regarding the pasturing of sheep in unorganized territory; c. 13 amends the Stock Inspection Act with regard to notice to be given prior to driving any stock out of the province, or to a point distant twenty miles or more, and their inspection by any person so desiring. C. 14 amends the Agricultural Pests Act respecting the supply of bait for destroying pests, and providing for the payment of half the costs by improvement districts or municipalities. The Private Grazing Associations Act, c. 16, provides for the establishment and management of such associations on the approval of the Minister, while c. 17 provides similar regulations regarding community grazing associations. C. 24 facilitates the borrowing of money for the purchase of seed grain and sets out regulations regarding loans and their repayment. C. 25 sets out in detail the provisions of the Domestic Animals Act (Municipalities), particularly regarding fences, pound districts, by-laws, charges on impounded animals, fees of pound-keepers, offences and penalties, mischievous animals, dogs and the driving or trailing of sheep. C. 43 provides regulations to facilitate the adjustment of agricultural debts.

Assessment.—The School Assessment Act is amended by c. 36 regarding appeals, distress, exemptions from payment of taxes, duties of employers of persons liable for taxes, assessment of persons who have escaped taxation and jurisdiction as to assessability, etc.

Buying and Selling.—C. 19, amending the Produce Merchants Act, provides that such merchants shall maintain a record of particulars of all transactions where price has not been paid on or before delivery of goods, and also that the giving of

a cheque in payment shall constitute a warranty that it will be honoured by a bank. The Bills of Sale Act is amended by c. 26 regarding registration districts, registration of assignments, validity of mortgages and validity of registrations of mortgages.

Education.—C. 35 amends the School Act with respect to authorization of borrowing operations by the Board of Public Utility Commissioners, fees, salaries of suspended teachers and the directions of the Minister on the alteration of boundaries of school districts. C. 37 makes numerous alterations in the amounts of and requirements for grants to schools and school districts in the province.

Elections.—C. 54, amending the Alberta Election Act, deals principally with advance polls and regulations concerning their operation.

Finance.—C. 1 provides for the payment from the General Revenue Fund of \$1,158,548 to defray expenses of the public service from Jan. 1 to Dec. 31, 1922, of \$18,420,247 for the year 1923, and of \$5,702,563 for the year 1924, with provision for unforeseen expenses on salaries, bonuses and increases of salaries which may be duly authorized. By c. 2, a sum of \$225,000 is appropriated from the General Revenue Fund to defray certain expenses incurred during the year 1923. C. 3 authorizes the Lieutenant-Governor to borrow \$2,000,000 on the credit of the province for the public service, for covering any of the debt of the province on open account, etc. A further loan of \$1,500,000 for similar purposes is authorized by c. 4.

Game.—C. 18, amending the Game Act, contains numerous changes and additions, chiefly regarding seasons, licenses and fees, both for trappers and traders, seizures, and powers of game guardians.

Insurance.—C. 45 enacts numerous conditions regarding automobile insurance, dealing with applications and contents of policies, and sets out fifteen statutory conditions governing the issue of policies and general transaction of such business. C. 48, the Accident and Sickness Policy Act, provides in a similar manner for uniform regulations governing the issue of such insurance, with statutory conditions appended.

Social Legislation.—C. 50 provides for the protection of children of unmarried parents, for setting out the powers and duties of the Superintendent of Neglected and Dependent Children and for orders for the support of mothers and children by the father on admission or proof of paternity. The Mothers' Allowance Act is amended by c. 51 in minor details, while in c. 52, the Mental Defectives Act is amended with regard to the provincial hospital for the insane, admission of mental defectives, discharges and fees of inmates.

Lands.—C. 20 amends the Irrigation Districts Act regarding the powers of district boards, taxation of property held by the board, statements required by the secretaries of municipalities and school districts, notices of annual meetings, debenture issues, election of officers and tax sales of land. The Drainage Districts Act is amended by c. 27 with respect to the general powers of the boards of various districts, exemption from taxation, statements by boards, annual meetings and reports, debenture issues, petitions for abandonment of works and subsequent procedure, collection of rates and sale of lands.

Legislation.—C. 7 amends the Direct Legislation Act regarding the submission of proposed Acts to the electors for approval, or the alternate submission of questions setting forth the principle of the Act, method of taking the vote, results and procedure on approval or otherwise.

Mining.—C. 31, the Coal Sales Act, sets out the powers of the Lieutenant-Governor in the regulation of the sale of coal in the province.

Municipalities.—The Town Act is amended by c. 28, which deals chiefly with the powers of councils, agreements between towns and hospitals, repeal and amendment of by-laws, taxation, exemptions and assessment. Similar amendments are made to the Village Act and the Improvement District Act in cc. 29 and 30. C. 34 amends the Municipal District Act, chiefly regarding the borrowing of money to supply seed grain to farmers in the district, and the assessment and taxation of residents.

Professions.—C. 57 amends the Dental Association Act in respect to the composition and election of the Board of Directors. C. 58, the Chiropractic Act, establishes the Advisory Board of Examiners and sets out their powers as examiners of persons desiring to practice as chiropractors in the province. The Act further regulates the fees of such applicants, qualifications, examinations and certificates.

Public Utilities.—The Public Utilities Act, c. 53, establishes, in Part 1, the Board of Public Utility Commissioners and outlines its composition and general procedure; it further deals with the disqualification of members, the Board's jurisdiction, practice and procedure, orders and annual report. Parts 2 to 8 of the Act outline the Board's powers as to public utilities, loans to local authorities, municipal finances, repayment of municipal debentures, separation of lands from urban municipalities, arrears of taxes and cancellation of plans of subdivisions.

Railways.—The Railway Act is amended by c. 42 with respect to tolls, relief from erection and maintenance of fences, etc., effect of the existence of insurance on property destroyed and penalties for certain offences.

Statute Law.—The Statute Law Amendment Act, c. 5, in some 50 sections, amends various statutes of the province, all in more or less minor details. C. 6 confirms the Revised Statutes of Alberta, 1922, giving them force and effect from Jan. 19, 1923.

Taxation.—C. 32 imposes a tax of 3 cents per acre on mining lands and provides for its collection; c. 33 imposes a tax of not more than 2 p.c. on the gross revenue of all mine owners, with provisions similar to those in the preceding Act; c. 39 provides for a tax of 3 p.c. on the gross revenue of every first vendor of beverages in the province; while in c. 40 provisions are enacted for the issuing of licenses to owners of slot machines, on the payment of annual fees.

British Columbia.

(Acts of the 4th session of the 15th Parliament, begun Oct. 29 and closed Dec. 21, 1923.)

Agriculture.—C. 2, amending the Apiaries Act, provides for the appointment of a Provincial Apiarist and inspectors, with powers of examination of apiaries in the province and other duties and responsibilities. The Egg Marks Act, c. 10, provides rigid restrictions governing the sale of eggs of foreign origin, and for the notification of provincial inspectors of the importation or storage of Chinese eggs, with the powers of inspectors under the Act. C. 63 gives force to the Live Stock and Live Stock Products Act, 1917, (Dominion) throughout the province.

Companies.—C. 4 provides for the formation of Cemetery Companies with their powers, duties and regulations *re* shares and shareholders, directors and officers. Slight amendments are made to the Trust Companies Act by c. 5.

Education.—The Public School Act is amended by c. 60, particularly respecting the powers of auditors of school districts, and school assessment.

Elections.—In c. 11, the Municipal Elections Act is amended with respect to notices of nomination and withdrawal of candidates.

Finance.—C. 40, the British Columbia Loan Act, authorizes the borrowing of \$2,000,000 to be expended under the Land Settlement and Development Act for provincial highways and bridges, and for the erection of public buildings, and under the Soldiers' Land Act. C. 59 amends the Revenue Act, while c. 68 provides for the expenditure of \$99,587 for the fiscal year 1923, \$960,852 for the fiscal year 1924, and \$19,286,413 for the fiscal year 1925.

Forestry.—The Forest Act, c. 17, provides in detail for the conservation and preservation of forests, and deals in twelve sections with (1) the Forest Branch of the Department of Lands, (2) the prevention of trespass on Crown timber lands, (3) the disposition of timber by the Crown, (4) timber leases, (5) special timber licenses, (6) rights-of-way, (7) royalties and taxes, (8) timber-scaling, (9) timber-marking, (10) manufacture within the province, (11) forest protection and (12) general provisions.

Game.—C. 18 amends the Game Act with respect to the shooting of deer and certain birds, regulations respecting Indians, methods of hunting and trapping, licenses, fees and royalties.

Hospitals.—The Hospital Act is amended by c. 21 with respect to finances and their administration, and the treatment of indigent persons.

Insurance.—In c. 26, amendments are made to the British Columbia Fire Insurance Act, with regard to the powers of the Superintendent of Insurance in his relations with companies; c. 27, the Life Insurance Act, deals with the application of the Act, contracts, insurable interest, policies on lives of minors, beneficiaries, proof of claim, payment and miscellaneous provisions; c. 28 amends the Mutual Fire Insurance Companies Act respecting reserve funds to be maintained by such companies; c. 29 deals with the records to be kept by all life insurance companies and their inspection by the Superintendent.

Lands.—C. 19 provides for the making of a certain agreement between His Majesty and the Grand Trunk Pacific Railway Company and the Grand Trunk Pacific Development Company, with an appended schedule containing the terms of the agreement. The Land Registry Act is amended by c. 31, chiefly respecting land sold subject to a charge and the procedure in such cases. The Land Settlement and Development Act is amended by c. 32 regarding the power of the board to modify existing purchase agreements with returned soldiers, and to make credits on lien notes after revaluation of property. The Land Act is amended by c. 34 in regard to payments to the Crown of purchase moneys. The Plans Cancellation Act, c. 56, provides for the cancellation of plans duly registered, on application by owners of all lands covered by the plans.

Legislation.—C. 6 amends the Constitution Act in respect of revision of voters lists, and in the appended schedule sets out the boundaries of the various electoral districts of the province. C. 39 provides for plebiscites on questions relating to the control or suppression of traffic in alcoholic liquors, with regulations regarding voting, expenses and subsequent regulations by the Lieutenant-Governor in Council. C. 62 provides for the preparation of the revised statutes of the province.

Mining.—C. 45 provides for the renewal of leases under the Coal and Petroleum Act; c. 47 amends the Coal Mines Regulation Act respecting Mining Accidents and penalties under the Act; and c. 48 amends the Placer-mining Act with regard to leases and powers conferred.

Motor Vehicles.—The Motor Vehicle Act is amended by c. 49, which sets out new traffic regulations, license fees and powers of provincial or municipal police.

Municipalities.—C. 8, the Dewdney Dyking District Act, outlines the powers and duties given to the commissioners of the district, and amends the Dewdney Dyking District Bonds Act with respect to charges and indebtedness of the district. C. 15 establishes the two-platoon system for employees of the fire departments of certain municipalities, and c. 16 amends the Fire Marshal Act with respect to destruction of buildings in disrepair and the costs incurred. C. 50, amending the Municipal Act, adds numerous powers to those already possessed by municipal councils; c. 51 treats of the re-issue of letters patent to municipalities and circumstances dependent on such re-issue, and c. 64 amends the Rural Street Lighting Act with regard to the taxes collectible by the province on lands of districts which have been abolished by order. C. 74 amends the Water Act regarding the duties of licensees under the Act, the cutting of timber by licensees, taxes payable by improvement districts, and the repayment of moneys expended on any works under the Act.

Professions.—The Legal Professions Act is amended by c. 35 regarding the election of benchers, representatives to the Canadian Bar Association and qualifications of applicants for call to the bar. C. 55 makes slight amendments to the Pharmacy Act.

Public Utilities.—C. 73, the Rural Telephone Act, provides for the incorporation of companies, and outlines the powers and duties conferred by incorporation.

Labour and Social Legislation.—C. 14 regulates the working hours of employees of certain municipal fire departments; c. 20 amends the Official Guardians Act with regard to moneys received, commission and investments. C. 21 amends the Hospital Act respecting the care of indigents, and c. 22 limits the hours of work of employees in industrial undertakings to 8 hours a day and 48 hours a week, with certain specified exceptions. C. 38 amends the Government Liquor Act, providing, in the first part, several general amendments, and in the second, certain amendments providing for the sale of beer by the glass. C. 42 amends the Lunacy Act regarding the powers conferred on the Attorney-General, and c. 43 deals with the issue of marriage licenses. The Police and Prisons Regulation Act outlines the constitution and operation of the provincial police force, and the establishment and maintenance of provincial gaols. C. 61 amends the Shops Regulation Act with respect to hawkers and peddlers; c. 67 amends the Summary Convictions Act regarding appeals, and amends the schedule to the Act, principally respecting fees of constables, witnesses and interpreters. C. 76 provides for the protection of women and girls in certain cases.

Taxation.—C. 58, the Probate Duty Act, establishes duties on every probate of 1 or 5 p.c., and includes or excepts certain gifts or bequests from estates; c. 65 amends the Succession Duty Act, providing for remission of the duty in certain cases; c. 69 amends the Taxation Act, and c. 70 the Amusements Tax Act, while cc. 71 and 72 provide for the imposition of taxes of $\frac{1}{2}$ cent per gallon on fuel-oil and 3 cents per gallon on gasoline.

III.—PRINCIPAL EVENTS OF THE YEAR 1924.

The Economic and Financial Year.—Taken as a whole, the year 1924 was somewhat disappointing, from the economic point of view. Though record crops had been harvested in 1923, the decline of prices to practically the pre-war level made these crops very generally unremunerative to the producers, whose diminished purchasing power was reflected in the dullness of Canadian manufacturing industries, as was indicated by the falling off in the index number of employment from an average of 94.6 in 1923 to 92.3 in 1924. It should, however, be remembered that the average of this index number was only 87.8 in 1921 and 87.9 in 1922, considerably below the 1924 level.

While imports fell off considerably from 1923, exports remained at a high level throughout the year, which thus showed a favourable balance of trade of no less than \$262,000,000; this large favourable balance enabled the Canadian dollar to remain either close to par or at par in the New York market throughout the year, and brings the resumption of gold payments within the range of practical questions. At the same time, the revenue suffered from the decline in imports.

Prices during 1924 showed two predominating trends. The official index number of wholesale prices, maintained by the Dominion Bureau of Statistics, fell from 156.7 in January to 150.6 in May; thereafter it rose fairly steadily until the end of the year, reaching 160.9 in December, the increase being most rapid from September, as a result of the great advance in the prices of agricultural commodities, owing to the world shortage of the crops. The prices of the chief agricultural commodities, instead of being at or near their pre-war levels, as in 1923, (see diagram on page 261 of this volume) are at the time of writing on a fairly even level with the prices of manufactured goods, so that the economic ship of state is now sailing on a more even keel as between agriculturists and manufacturers.

While business in 1924 was rather dull and the demand for capital was thus somewhat restricted, the supply of capital offered for investment increased, with the result that interest rates showed a material decline during the year. Thus, at the end of 1923, the yield on the 1934 taxable bonds of the Canadian Government was 5.22 p.c., a yield reduced to 4.93 p.c. at the end of 1924. During the year the Canadian people purchased no less than \$346,000,000 of bonds.

The reduction in interest rates in 1924 enabled the Dominion Government to refund maturing loans at a substantial saving in interest charge, thus bringing about a lightening of the heavy burdens which the Canadian people have been bearing since the war.

During the autumn and winter of 1924-25, the influence of higher prices for agricultural products, combined with the improvement in the political situation in Europe and the increasing stabilization of European currencies (at the time of writing the pound sterling is above \$4.79, or only about 7 cents below par, in New York) were leading to the expectation of better business in 1925.

British Empire Exhibition.—On April 23, the British Empire Exhibition at Wembley was opened by Their Majesties the King and Queen, and remained open until Nov. 1. Exhibits were made both by the British Government itself and the Governments of the other parts of the Empire. The Canadian Parliament, in 1923 and 1924, appropriated \$1,400,000 to meet Canada's share of the expenditure, and the following appreciation of the part which Canada played at Wembley appears in Whitaker's Almanac, a widely-known British publication:

"The huge building occupied by Canada contained an exhibition in itself and moreover a large one. The main building was flanked by subsidiary pavilions devoted respectively to the Canadian Pacific Railway and the Canadian National Railways, and the displays of these great concerns, with their wonderful panoramic exposition of Canadian scenery, formed fitting introductions to the main edifice. In the latter, all the great Canadian industries were dealt with in the most complete and graphic manner. Maps in relief and most realistic models enabled visitors to see Canada in miniature from the Atlantic to the Pacific. The country's vast resources in timber, minerals, agricultural and dairy produce, fish, fur and other directions were displayed in all possible ways, and the highly important exhibits of manufactured goods in wide range showed that Canada possesses in no small degree facilities for converting the raw material into the finished product."

Trade Convention with Belgium and Luxembourg.—A trade agreement was signed in Ottawa between the representatives of the Canadian and the Belgian Governments on July 3, 1924. The signatories on behalf of Canada were the Hon. J. A. Robb and the Hon. Henri S. Béland, and on behalf of Belgium and Luxembourg, M. Florent de Selys-Fanson, Consul-General of Belgium at Ottawa.

Briefly, the Convention provides for most-favoured-nation treatment to be granted by Canada to the Economic Union of Belgium and Luxembourg, and by the Economic Union of Belgium and Luxembourg to Canada. The term "Economic Union of Belgium and Luxembourg" is understood to include the colonies and possessions of Belgium and also territories of which Belgium is mandatory under the provisions of the League of Nations.

Provincial General Election.—On June 20, a provincial general election took place in British Columbia, no fewer than five parties securing representation in the new Legislature. As the strongest of these parties, the Liberals, under the Hon. John Oliver, retained office.

Prohibition Referendum in Saskatchewan.—On July 16, a referendum in Saskatchewan declared, by a decisive majority, for the repeal of the Saskatchewan Temperance Act and the inauguration of a system of government control of the sale of liquor.

Meetings of the British Association for the Advancement of Science and the International Mathematical Congress.—The British Association for the Advancement of Science, which had on three previous occasions held its annual meetings in Canada (Montreal 1884, Toronto 1897, Winnipeg 1909), held its annual meeting in Toronto from August 7 to August 13, under the presidency of Sir David Bruce, famous for his services to tropical medicine. While Canadian scientists benefited by the contact of minds and the consequent stimulus, British scientists were enabled not only to become acquainted with the work done in Canadian universities and in the Government services, but also to see Canada, many of them taking advantage of the special rates granted by the railways to visit the Pacific coast.

The International Mathematical Congress held its triennial meeting in Toronto from Aug. 11 to Aug. 16, the first occasion on which it had met outside of Europe. A Canadian, Dr. J. C. Fields, Professor of Mathematics in the University of Toronto, was chosen as its president, while vice-presidents were elected for each of the principal countries represented at the Congress, *viz.*: Belgium, Czecho-Slovakia, Denmark, England, France, Holland, Italy, Jugo-Slavia, Norway, Poland, Portugal, Sweden, Switzerland and the United States.

Prohibition Plebiscite in Ontario.—On Oct. 23, 1924, a plebiscite was taken in Ontario on the question of the continuance of the Ontario Temperance Act or, as an alternative, the introduction of "the sale as a beverage of beer and spirituous liquor in sealed packages under Government control". The popular decision was in favour of the continuance of the Ontario Temperance Act, though the majority for prohibition was considerably reduced.

Obituary, 1924.—Jan. 16, Hon. Featherston Osler, Toronto, Ont., former Judge of Ontario Court of Appeal. Jan. 28, Hon. W. B. Chandler, St. John, N. B., Judge of the Supreme Court of N.B., King's Bench Division. Feb. 3, W. A. Bowden, Ottawa, Ont., Chief Engineer, Department of Railways and Canals. Feb. 5, Lawrence K. Fortescue, former Comptroller, Royal Northwest Mounted Police. March 1, Hon. Valentine Ratz, New Hamburg, Ont., Senator. March 8, Hon. S. E. Reid, Tryon, P. E. I., Speaker of the Provincial Legislature, 1901-04, and Commissioner of Agriculture, 1905-08. March 27, Sir Edmund Walker, D.C.L., LL.D., C.V.O., Toronto, Ont., President, Canadian Bank of Commerce. April 18, Angus Claude MacDonnell, Toronto, Ont., former Senator. April 22, Lt.-Col. William H. Merritt, M.D., St. Catharines, Ont., Vice-President of the Imperial Bank. April 26, Lewis H. Colman, Secretary, Public Works Department, Ottawa, Ont. May 1, Rt. Hon. Sir Louis Henry Davies, K.C., K.C.M.G., Ottawa, Ont., Chief Justice of the Supreme Court of Canada, 1918-1924. May 10, Henry Watters, Mayor of Ottawa. May 12, Earl of Ashburnham (Thomas Ashburnham), Fredericton, N.B., died in London, England. May 26, Lt.-Col. William Hendrie, Hamilton, Ont. June 4, John A. MacKelvie, M.P. for Yale, B.C., died in Ottawa. June 9, Herbert J. Daly, Toronto, Ont., President of the Home Bank of Canada. June 16, Sir Charles Townshend, Wolfville, N.S., former Chief Justice of Nova Scotia. June 21, Philip E. Ritchie, Ottawa, Ont., Registrar of Copyrights and Trade Marks, Department of Trade and Commerce. June 29, Dr. Frederick Torrance, B.A., D. V. S., Guelph, Ont., former Veterinary Director-General of Canada. July 7, Hartley H. Dewart, K.C., ex-M.L.A., Toronto, Ont. July 31, John Morrissey, Newcastle, N.B., M.P. for Northumberland, N.B. Aug. 4, Sir Edmund Osler, Toronto, Ont., President of Dominion Bank and former M.P. Aug. 6, Hon. J. M. McDougall, Aylmer, Que., Judge of the Superior Court, Montreal District. Aug. 9, Hon. F. B. Carvell, Woodstock, N.B., Chairman of Board of Railway Commissioners and former Minister of Public Works. Aug. 14, Hon. Joseph Bolduc, St. Victor de Tring, Que., former Speaker of the Senate. Aug. 27, Edson J. Chamberlin, former President of the Grand Trunk Railway system. Sept. 2, Lt.-Col. Hon. George W. Fowler, Ottawa, Ont., Senator. Sept. 9, Henry J. Meiklejohn (of Parliamentary Library), Ottawa, Ont. Sept. 11, Sydney Smith, I.S.O., Ottawa, Ont., formerly Controller of Postal Stores. Sept. 14, Albert Hagar, Plantagenet, Ont., former M.P. for Prescott Co., (1867). Sept. 19, James Carruthers, Montreal, Que., known as "Canada's Wheat King". Sept. 21, Edouard G. D. Deville, LL.D., D.T.S., I.S.O., Surveyor-General, Ottawa, Ont. Sept. 23, Hon. Jean L. Coté, Edmonton, Alta., Senator. Oct. 2, Sir William Price, Quebec, Que., accidentally killed at Kenogami, Que. Oct. 4, Louis N. Rhéaume, Ottawa, Ont., former consulting engineer with Department of Railways and Canals. Oct. 9, Charles A. Gauvreau, Fraserville, Que., M.P. for Témiscouata, Que. Nov. 9, F. C. Wade, K.C., Agent-General for the Province of British Columbia in London, England. Dec. 4, James Mills, M.A., LL.D., Ottawa, Ont., former Librarian and Supervising Officer, Board of Railway Commissioners for Canada. Dec. 14, Hon. John Yeo, Port Hill, P.E.I., Senator. Dec. 15, Col. E. E. Clarke, Ottawa, Ont., Director of Transport and

Supplies, Department of National Defence. 1925. Jan. 27, W. D. Scott, Ottawa, Ont., formerly Assistant Deputy Minister of Immigration. Feb. 4, Dr. Willet G. Miller, Chief Geologist, Department of Mines, Toronto, Ont.

IV.—EXTRACTS FROM THE CANADA GAZETTE— OFFICIAL APPOINTMENTS, COMMISSIONS, etc.

Privy Councillors.—1924. Jan. 30, Pierre J. A. Cardin, M.P., Sorel, Que. Sept. 20, Harold B. McGiverin, K.C., M.P., Ottawa, Ont.

Lieutenant-Governors.—1924. Jan. 8, Hon. Narcisse Pérodeau, Montreal, Que., Legislative Councillor and Member of the Executive Council of the said Province: to be the Lieutenant-Governor in and over the Province of Quebec, in the room and stead of Hon. Louis P. Brodeur, deceased. Sept. 3, Frank R. Hartz, Charlottetown, P.E.I.: to be Lieutenant-Governor of the said Province from 8th Sept., 1924. 1925. Jan. 12, James Robson Douglas, Amherst, N.S.: to be Lieutenant-Governor in and over the said Province of Nova Scotia, in the room and stead of His Honour McCallum Grant, resigned.

Cabinet Ministers.—1924. Jan. 30, Hon. Ernest Lapointe, Minister of Marine and Fisheries: to be Minister of Justice of Canada. Hon. Pierre J. A. Cardin, a member of the King's Privy Council for Canada: to be the Minister of Marine and Fisheries. Sept. 20, Hon. Harold B. McGiverin, a member of the King's Privy Council: to be Minister Without Portfolio.

Senators.—1924. Gazetted Feb. 9, appointed Aug. 14, 1923, Hon. Jean L. Côté, Edmonton, Alberta. March 10, Andrew Haydon, Ottawa, Ont. May 5, Clifford W. Robinson, Moncton, N.B.

New Members of the House of Commons.—1924. Jan. 2, William Anderson Black, Electoral District of Halifax, N.S. Jan. 12, Alexandre J. Doucet, Electoral District of Kent, N.B. Sept. 15, William J. Hushion, Electoral District of St. Antoine, Que. Sept. 22, Sir Eugène Fiset, Electoral District of Rimouski, Que. Oct. 21, William B. Snowball, Electoral District of Northumberland, N.B. Dec. 3, Grote Stirling, Electoral District of Yale, B.C. Dec. 9, Charles E. Hanna, Electoral District of West Hastings, Ont.

Judicial Appointments.—1924. Jan. 15, Hon. Robert Smith, a Justice of Appeal of the Second Divisional Court of the Supreme Court of Ontario: to be a Justice of Appeal of the First Divisional Court of the said Supreme Court of Ontario. Jan. 15, John G. Cory, Winnipeg, Man., Barrister-at-law: to be a Junior Judge of the County Court of the Eastern Judicial District of the Province of Manitoba. Jan. 30., The Hon. Arthur C. A. Malouin, a Judge of the Superior Court in and for the Province of Quebec: to be a Puisne Judge of the Supreme Court of Canada. Ernest Roy, Quebec, Que., one of His Majesty's Counsel learned-in-the-law for the said Province: to be a Puisne Judge of the Superior Court in and for the said Province. March 4, Arthur T. Leblanc, Campbellton, N.B., one of His Majesty's Counsel learned-in-the-law: to be a Judge of the King's Bench Division of the Supreme Court of New Brunswick. May 27, Malcolm A. Macdonald, Vancouver, B.C., one of His Majesty's Counsel learned-in-the-law for the said Province: to be a Puisne Justice of the Court of Appeal for British Columbia with the style and title of Justice of Appeal. June 12, Hugh O'Leary, retired Senior Judge of the District Court of the Provincial Judicial District of Thunder Bay, Ont.: to be Deputy Judge of the said District Court of the Provisional Judicial Court of Thunder Bay, Ont. William I. McMullen, Woodstock, Ont., one of His Majesty's Counsel learned-in-

the-law for the said Province: to be Deputy Judge of the County Court of the County of Oxford, Ont. July 4, His Honour Lewis St. George Stubbs, a Judge of the County Court for the Northern Division of the Eastern Judicial District in the Province of Manitoba: to be Senior Judge of the County Court for the Eastern Judicial District in the said Province of Manitoba and Dick Alexander Stacpoole, Winnipeg, Man., Barrister-at-law: to be a Junior Judge of the County Court for the Eastern Judicial District in the said Province of Manitoba. Aug. 23, Malcolm G. Cameron, Goderich, Ont., one of His Majesty's Counsel learned-in-the-law for the said Province: to be a Judge of the County Court of the United Counties of Northumberland and Durham. His Honour Malcolm G. Cameron, Judge of the County Court of the United Counties of Northumberland and Durham: to be a Local Judge of the High Court of Justice of the Supreme Court of Ontario. Aug. 27, Hon. Horace Harvey, Chief Justice of the Trial Division of the Supreme Court of Alberta: to be the Chief Justice and President of the Appellate Division of the Supreme Court of Alberta and to be *ex officio* a Judge of the Trial Division of the said Court. Hon. William C. Simmons, a Justice of the Trial Division of the Supreme Court of Alberta: to be the Chief Justice of the Trial Division of the Supreme Court of Alberta and to be *ex officio* a Judge of the Appellate Division of the said Court. John R. Boyle, Edmonton, Alberta, one of His Majesty's Counsel learned-in-the-law for the said Province: to be a Justice of the Trial Division of the Supreme Court of Alberta and to be *ex officio* a Judge of the Appellate Division of the said Court. Sept. 16, Hon. Francis A. Anglin, Puisne Judge of the Supreme Court of Canada: to be the Chief Justice of Canada, in the room and stead of Right Hon. Sir Louis H. Davies, K.C.M.G., deceased. Sept. 16, Hon. Thibaudeau Rinfret, a Judge of the Superior Court for the Province of Quebec: to be a Puisne Judge of the Supreme Court of Canada from 1st October, 1924. Sept. 17, Thomas E. Godson, former Commissioner under the Mining Act of Ontario and one of His Majesty's Counsel learned-in-the-law for the said Province: to be confirmed in and appointed to the office of Judge of the Mining Court of Ontario. Sept. 20, Edmund L. Newcombe, Ottawa, Ont., C.M.G., one of His Majesty's Counsel learned-in-the-law and the Deputy Minister of Justice of Canada: to be a Puisne Judge of the Supreme Court of Canada. Oct. 1, Hon. J. Hayes Barry, a Judge of the King's Bench Division of the Supreme Court of New Brunswick: to be Chief Justice of the said King's Bench Division of the Supreme Court of New Brunswick. Louis J. C. E. Boyer, Montreal, Que., one of His Majesty's Counsel learned-in-the-law for said Province of Quebec: to be a Puisne Judge of the Superior Court in and for the Province of Quebec. Oct. 4, Hon. James P. Byrne, Bathurst, N.B., Attorney-General of New Brunswick: to be a Judge of the King's Bench Division of the Supreme Court of New Brunswick. Dec. 11, Edward R. Cameron, Ottawa, Ont., one of His Majesty's Counsel learned-in-the-law and Registrar of the Supreme Court of Canada: to be Vice-President of the Commission for the revision and consolidation of the public statutes of Canada, in the room and stead of Hon. Edmund L. Newcombe, C.M.G., who resigned the said office. William S. Edwards, Ottawa, Ont., of Osgoode Hall, barrister-at-law and Assistant Deputy Minister of Justice: to be Deputy Minister of Justice, *vice* Hon. E. L. Newcombe, C.M.G., appointed Judge of the Supreme Court of Canada.

Commissions.—To be Members of the Commission for the revision and consolidation of the Public Statutes of Canada: Dec. 28, 1923. Rt. Hon. Sir Charles Fitzpatrick, G.C.M.G., Quebec, Que., President. Dec. 28, 1923, Edward J. Daly, Barrister-at-law, Ottawa, Ont., Member. Louis A. Rivet, one of His

Majesty's Counsel learned-in-the-law, Montreal, Que., Member. F. R. McDonald Russell, one of His Majesty's Counsel learned-in-the-law, Vancouver, B.C., Member. Alexander MacGregor, Barrister-at-law, Toronto, Ont., Member, in the room, place and stead of the late H. H. Dewart, K.C. Jan. 30, 1924, Hon. Ernest Lapointe, Minister of Justice, Ottawa, Ont., Member *ex officio*. Hon. Edward J. McMurray, Solicitor-General, Ottawa, Ont., Member *ex officio*.

1923. Aug. 14. Joseph Picard, Manufacturer, Quebec, Que., Apollos B. Kerr, Barrister-at-law, Toronto, Ont., Robert W. McLellan, Barrister-at-law, Fredericton, N.B., Joseph G. Sutherland, Lumberman, Clyde River, N.S., and William Anstie Contractor, Vancouver, B.C.: to be Commissioners to enquire into and report on the forest resources of Canada, with particular regard to wood of various kinds available for the manufacture of pulp. The said Joseph Picard to be Chairman and Ernest H. Finlayson, Acting Director of Forestry, Department of Interior to be Secretary of the said Commission. Dec. 23. William James Wright, Minneapolis, Minnesota, U.S.A., Barrister-at-law and Solicitor of the Provinces of Ontario and Manitoba: to be a Commissioner to administer oaths and to take and receive affidavits, declarations and affirmations in any and every of the United States of America, in or concerning any proceeding had or to be had in the Supreme or Exchequer Courts of Canada, and to administer, take and receive such other oaths, affidavits, declarations and affirmations as by law it is competent to administer, take or receive in any and every of the said United States of America. **1924.** Feb. 27. The Hon. Harrison A. McKeown, Chief Justice of the King's Bench Division of the Supreme Court of New Brunswick: to be a Commissioner to investigate into and report upon the affairs of the Home Bank from the date of its charter to the date of its failure. March 26. David Campbell, Winnipeg, Man., one of His Majesty's Counsel learned-in-the-law for the said Province: to be a Commissioner to inquire into and report upon any and all irregularities and frauds of any kind whatsoever in connection with contracts for the supply of coal to the Department of Militia and Defence and to the Department of National Defence, respectively, at Winnipeg, Man., from the year 1918 to the present date. The said investigation has been further extended at different dates so as to include the business of other associations, firms or corporations. March 31. Major Alexander A. Mulholland, Toronto, Ont.: to be a Member of the Toronto Harbour Commission in the room and stead of John Laxton, deceased, for a term of three years from March 31, 1924. April 17. Arthur O. Hogg, Toronto, Ont.: to be a Member of the Toronto Harbour Commission for a term of three years from March 31, 1924, in the room and stead of Robert S. Gourlay, resigned. July 2. Lewis Duncan, Toronto, Ont., Barrister-at-law: to be a Commissioner under the Combines Investigation Act, 1923, to investigate into and report upon the business, or any part thereof of the Mutual Brokers (Vancouver) Limited of the City of Vancouver, B.C., the Nash Company of the City of Minneapolis, Michigan, U.S.A., The Growers Sales Agency, Limited, Calgary, Alberta, and the Mutual Purchasing Company, Limited, Winnipeg, Man. July 17. L. E. Charbonnel, Cookshire, Que.: to be a Commissioner to investigate and report upon charges of political partizanship against Government employees in the electoral district of Compton, Que.; and Maurice Basset, Percé, Que.: to be a Commissioner to investigate charges of political partizanship preferred against Daniel Boutin, lightkeeper, at Grand River Wharf, Que. Sept. 16. Hon. Harrison A. McKeown, Chief Justice of the King's Bench Division of the Supreme Court of New Brunswick: to be Chief Commissioner of the Board of Railway Commissioners for Canada. Oct. 24. David Campbell, Winnipeg, Man., one of His Majesty's

Counsel learned-in-the-law for the said Province of Manitoba: to be a Commissioner under the Combines Investigation Act, 1923, to investigate the business or any part thereof, of the Winnipeg Retail Coal Dealers' Association and other firms or corporations. Nov. 1. L. E. Charbonnel, Cookshire, Que.: to be a Commissioner to investigate any charges of political partizanship that may be referred to him, in any part of the Province of Quebec.

Official Appointments.—1924. Jan. 18. Georges Gonthier, Montreal, Que., Chartered Accountant: to be Auditor-General of the Dominion of Canada, in the room and stead of Edward D. Sutherland, deceased. Feb. 28. Peter T. Coolican, Superintendent Postal Service, William J. Glover, Financial Superintendent of the Post Office Department and Arthur Webster, Secretary of the Post Office Department, Ottawa, Ont.: to be delegates to represent the Dominion of Canada at the Congress of the Universal Postal Union to be held at Stockholm, Sweden, during the year 1924. March 7. George Joseph Desbarats, C.M.G., Ottawa, Ont., Acting Deputy Minister of National Defence: to be Deputy Minister of National Defence. March 8. George Hilton, Ottawa, Ont.: to be Veterinary Director-General. April 12. Arthur L. Clark, B.Sc., Ph.D., Dean of the Faculty of Applied Science, Queen's University: to be a member of the Research Council of Canada in the room and stead of Dr. W. L. Goodwin, resigned. Prof. Arthur Frigon, Department of Electrotechnics, University of Montreal, to be a Member of the said Council, in the room and stead of Arthur Surveyer, retired by rotation, and that Sir George Garneau and Dr. Archibald B. Macallum, retired by rotation, be reappointed Members of the said Research Council of Canada, said appointments being for a period of three years terminating on March 31, 1927. April 29. Theodore V. S. Wunsch, Inspector in the Royal Canadian Mounted Police: to be a Justice of the Peace for Canada. July 3. Captain William P. S. Curtis, 2nd Battalion, The Rifle Brigade: to be an Aide-de-Camp to the Governor-General *vice* Major R. W. Gordon, M. C., resigned. July 19. George D. Finlayson, Ottawa, Ont.: to be Superintendent of Insurance as Deputy Head of the Department of Insurance. July 26. Harold A. Bowie, M.D., Ottawa, Ont.: to be a Member of the Federal Appeal Board. Sept. 3. Henri A. Lafleur, M.D., Montreal, Que.: to be reappointed as a Member of the Medical Council of Canada, for a term of four years from 26th Nov., 1924. William A. Thomson, M.D., Regina, Sask., and Peter A. McLennan, M.D., Vancouver, B.C.: to be Members of the Medical Council of Canada for a term of four years from the 26th Nov., 1924. Sept. 20. Frederick C. Blair, Secretary, Dep't. of Immigration and Colonization: to be Assistant Deputy Minister, Dep't. of Immigration and Colonization. Sept. 16. The Hon. Francis A. Anglin, Chief Justice of Canada: to be Deputy of His Excellency the Governor-General. Sept. 17. His Excellency the Governor-General has been pleased to revoke the Order in Council dated the 26th July, 1924, appointing Harold A. Bowie, M.D., Ottawa, Ont., a Member of the Federal Appeal Board, and to confirm his appointment as Chief Medical Officer of the said Board, with authority to act as a Member of the Board and to hear appeals as a Member of that Board for a period of two years from July 26, 1924, whenever he is requested so to do by the Chairman of the Board. Nov. 4. Captain Charles S. Price-Davies, M.C., The King's Royal Rifle Corps, to be an Aide-de-Camp on His Excellency the Governor-General's Staff. Nov. 29. George W. Hyndman, from Comptroller of Currency to Assistant Deputy Minister, Department of Finance, Ottawa. Dec. 13. John D. Craig, from International Boundary Commission Engineer, to Director-General of Surveys, Ottawa, Ont. Harry N. Cheney, Department of In-

terior: to be Secretary of the Geological Surveys, Department of Mines, Ottawa, Ont. Dec. 23. Lt.-Col. Humphrey W. Snow, C.M.G., D.S.O., Reserve of Officers, The Queen's Own (Royal West Kent Regiment): to be Comptroller of the Household of His Excellency the Governor-General. 1925. Jan. 7. Arthur Beauchesne, Ottawa, Ont., one of His Majesty's Counsel learned-in-the-law for the Province of Quebec, and Clerk Assistant of the House of Commons: to be Clerk of the House of Commons, in the place of William B. Northrup, superannuated. Thomas M. Fraser, Ottawa, Ont., Journalist: to be Clerk Assistant of the House of Commons. Jan. 24. Thomas L. Simmons, Assistant Chief Engineer, Board of Railway Commissioners: to be chief Engineer. Jan. 27. His Excellency the Governor-General has been pleased to appoint Group Captain J. S. Scott, M.C., A.F.C., to be an Honorary Aide-de-Camp and Lieutenant John Robert Chaplin, R.O., 10th (P.W.O.) Royal Hussars, to be an Aide-de-Camp on his Staff. Jan. 31. H. A. K. Drury, Division Engineer, Board of Railway Commissioners: to be Assistant Chief Engineer.

Day of General Thanksgiving.—Monday, November 10, 1924, was appointed by proclamation as a "day of general thanksgiving to Almighty God for the bountiful harvest and other blessings with which Canada has been favoured this year."

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Dominion Bureau of Statistics
The Canada Year Book
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